## SPECIAL GODSFIRE ISSUE

GODSFIRE: a prehistory

## Producing GODSFIRE

GODSFIRE session narrative
plus...
Stellar Conquest Expanded
An OGRE variant
"G.E. V."
and eight game reviews

## 留PACE GAMER



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## WHERE WEPE GOING

Some words of explanation are in order for this issue. GODSFIRE, our largest game to date, is a huge success. For this reason we have included three GODSFIRE articles and beefed up this issue to a total of 48 pages. There are three months listed on the table of contents but the whole number keeps everyone's and we wanted. The next the one month we wanted. The next issue will be out issue will two months. The next featuring an androcame issue featuring an introductory article on MELEE with some variant articles nd other goodies
The book column will be back next issue, it was bumped for space DOOMFARERS OF CORAMONDE Daley if you like fantasy biven ture. Get THE MALACLA Brian Aldiss if you tha TAPESTRY by literature. If you must read THE SWORDS OF SHANNARA by t read THE wait for the $\$ 1.25$ py Terry Brooks excellent Hildebrandt brothers art is sure to be available in a cal endar soon.

WORK IN progress: MELEE will be ready for shipping a week or two after you get this issue. WARPWAR is MicroGame \#4 as a two player ship combat game. You build ship and bases and fight them in a diceless CRT. Movement is on a hex grid of star with some stars connected by warplines for instantaneous movement. Also in the micro mill but not yet sequenced are EREWHON, OGRE II, CHITIN II, a multi-player time combat game, an unnamed robot war game, and a martian ground combat game.

Large games working are LABYRINTH and HYMENOPTERA. LABYRINTH is our fantasy role playing biggie. HYMENOPTERA, well I'm still not satisfied with it. A strategic game at the tactical level was a conceptual mistake. A strategic game with $3,000+$ counters is wrong when each player needs only 20-30 units on the map at a time. The final version will be a pure strategic game. Other games in the series will carry the specific unit and tactical detail. The goal now is a 10 game that six can play in four to six hours. It's been a long wait but it'll be right when you get it.

The format of Where We're Going will likely change next issue. It will be devoted more to a question
and answer format, like the last of this column.

PATRON SUBSCRIBERS should note that their payments are going into a special fund. It will go for a game project we wouldn't otherwis be able to do rather than for phone bills and paper clips. Those who've asked for a payment plan to ease the pain of a $\$ 100$ chunk will be pleased to note that we will now accept $\$ 25$ a month for four months. Your Patron subscription will start after you have accumulated the whole $\$ 100$ payment.

THANKS to all those readers who sent us the names of stores who sel games in their area. It works and we have several new outlets. Stores listen to their customers and will carry what they ask for. The micros are the best bet. Our only retailer complaint is keeping them in stock.

TOO MUCH material on our own games is a frequent complaint. We print the best of what we get. Most of it is on our stuff. If you want other games covered then send us something on your favorite game. We prefer more variety but we won't put poorly written material in just for balance.

BACK ISSUES are going fast. All of $1,2,3$, and 4 are gone. Ten is in very short supply and nine won't be available for long either. Issues 5, $6,7,8$ and 11 are in good supply. SOLITAIRE games are a constant demand. We're working on some ideas in this area but won't have anything are fair bets for Solita and MELEE are fair bets for solitaire play if you're willing to devise your own
CLUB DISCOUNTS have been asked for but won't be available soon. We already have our TSG discounts. The problem is that we can't give any publishers and don't wames of other special additional discount have a our products wal discount on just our products. We are trying to work something out

FREE TSG sample are no longer being sent out. You'll have to pay cash money now, even with information requests.

WHY DON'T you do a game on (book comic movie, etc.) is often asked. Getting rights for a game to copyrighted material is an effort. Then there's the extra work of designing to an existing format. We'd rather do games on our own themes. It's ore fun, easier, and gives bette games.

## man-to mau coulbat will archaic weapons...

MicroGame 3 is -

## fletyele

Game design by Steve Jackson / Illusirated by Liz. Danforth

Components include:

- 81/4"x 14" arena map
- Over 50 fighter counters
- Illustrated rule booklet
\$2.95-\$2.50 to The Space Gamer subscribers.

Melee is a game of individual onibl. Each counter represents - minite fighter - human, fanaly, buast, or monster. Mavers "ereale" their own warlots, frmb them with the
weapona ot hiet choice, and send weapona ot their cholce, and send lhent luto tombar. Vecors gain experfenes and impobe their Melee is excellemit for solitatice play. It also serves as the perfeet combat supplement for fantasy role-playing games. At last...a fast-moving, realistic way to fight dungeon battles. Each turn represents ten seconds real time. Melee may be ordered now for shipment about June 20, 1977.

# METAGAMING CONCEPTS 

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## A SPECIAL SECTION

## GODSFIRE

a prehistory
by
Lynn Willis

This game had three parents First, the interesting times of the last fifteen years provoked me to read much history and sociology. mised to be an informal Concepts promised to be an informal and sympafinally cience, being a lifelong reader of well-formed and I saw no SF ware (not even Stellar Conquest or not even Stellar Conquest or which did' quite what

I began thinking about the game in February, 1976. By April, I game in February, 1976 . By April, May Howard Thompson said he thought so too. The contract was signed in August; play-testing started in September. Since I 1ive in San Francisco, collaboration was not attempted. The mechanics of the original were improved in many ways and the elegantly detailed Combat rules should have a "Built in Austin" label. The result is clean (I've found but two rough spots in my copy) and smooth-playing. The game is, I think, a remarkably clear simulation of complex events. The responsibility for this gracefulness belongs to the other people
in the credits: Steve Jackson in particular, Howard Thompson, E1ton Fewell, Robert Taylor, Susan Tunne11, and the obviously crackerjack Tabletop Generals.

I had designed a previous game, done as a gift for a friend. Putatively a space game, it more resembled an eastfront armor game, but the experience made me respect writing rules. I therefore had an idea of what $I$ was getting into when I began what was originally titled Wars of the Narym.

The development went fairly smoothly, mostly because of a comprehensive shopping list. I wanted the following: 1) limited or negligible stacking of counters; 2) 1ow 3-D movement systion; 4) a simple -D movement system; 4) simultan5) an eas amenable to solitaire pasic game dramatic and rea verse which definitely related play; 7) a socio-political module which inter-related Revenue module Popular Approval and Internarty, Input; 8) a module which would not displace anything learned in the basic game; and 9) characterized governmental systems which could be
tried out under differing conditions. Alas, I couldn't get 9) to work, though I may someday be able to retro-fit it.

Implicit in this was a feeling of wanting an ethical game. I want ed the players, even if they felt no special relationship to their hypothetical populace, to at least feel a little fearful at what that populace could do. Robots in place of people is not a future I find entertaining. These imaginary beings do not exist to bolix Master Plans, though they can do that. They are the medium through which players duel with uncertadinty. It behooves us to act kindly, even with dreams

Having so said, someone is now wondering why I destroyed a star cluster to provide a game rationale. Such a question leads me to the consideration of th

I detest putting more than one counter on a hex. I know that there is need for raising little layered monoliths on wargame maps, and that efficient, and that, tacticaily, stacking hides weakness and streng th in a shell game using dreadnoughts or divisions instead of peas. No matter. I hate stacking. I cannot remember what's under which, or even if I have a what left, since I may have lost it last turn while I was trying to find my there. If I fan a counter stack to see beneath, my cairn crumbles across the board while my opponent shrieks, "That's a move! That's a move!"

Godsfire lessens such trauma. PDF/AG operations benefit from the large system sheet areas; SQD augmentation acts as a carrot and consolation prize for stacking freaks.

In considering stacking, a cautionary tale suggested itself to me of what would happen if someone dared overstack: the Cluster-Buster born! Continuing with this problem, I had to ask why such a concentration would occur, and where, in a very empty universe, such forces would be able to concentrate. Obviously, as in Stellar Conquest, in the heart of an open cluster, where hypothetically, tightly packed and productive planets would draw marauders like honey draws flies. added faster-than-1ight voice/ picture communication so that insult could flow freely. This seemed a logical and consistent arena for line of the game's rationale. The

Godsfire dithtet alre efplains, beyond simpte dereney, why the rules do not permit phantavy declmation.

Since I knew the game would be two-tiered and comples in total, I wanted low unit differentlation. No player should be foreed to luggie party balances, fund allotment, and forty-eleven pecaliarly valued com bat units. Further, sillce the ganc would be one of growth, 1 , llil not think that Metagaming would enjoy producing a game with 6000 counters As published, the unit propertios are instinctive, paralleling the producing party's policies, and that's the way it should be.

Continuing down the shopping list, I discovered no simple 3-D movement system exists. Determined not to use notation, which is a pain and sheer chaos if you own more than a dozen units, I finally settled for the present system, which is nothing more than the height chit technique from air games turned inside out, so that the chits are printed on the map Howard T. called this a graphic marker syst a clear enough. As I write, Godsfire is the only game I know of which uses said technique. It is the counters need maneuvering.

## counters need maneuvering.

The obvious drawhacks are that arranging all those levels like a spiral staircase takes room, and that drawing them makes you blind. Two mapsheets were needed to proraising the price of the game. The full map provides 2112 cells for movement, almost exactly the number of spaces contained by an SPI $34 \times 22$ $5 / 8^{\prime \prime}$ hexsheet. In terms of production, graphic markerism is a step backward, cutting efficiency in half.

In terms of decision time dur ing play, the Godsfire system is much more efficient than notation, by a factor of two or three, and increasing drastically when the number of units rises above twenty. Since there are two counters for a height chit display, and one has to be changed with each altitude change, this system also is slower, even if you immediately find the last " 7 in the counter mix.
A further and more serious drawback may be that the map is tactically tight--a unit cannot be farther than four cells from one of the sides. This is not a "vast three-dimensional sea," as the is it a "small, flat lake." My
first conception was of a view-tank and $I$ (at first) drew it that way. That might have been a good idea to keep.
(All names on the strategic map were drawn from the Times atlas; some were altered to fit ablind-
shortening since discarded. I regret du11. Narym is fri-syllablism gets Siberian province? berian province.)

Movement allowances were kept low, to keep units from bouncing ff the walls. The initiative sys attempts intended to discourage ide a feel of reality. and to pro was extended in testing to idea much more bluffing and secondguessing. As it stands, this is on $f$ the best features of the game

Most FGSF games get terrible solitaire play ratings (Dungeon Dragons gets a 2 on an $0-9$ scale basic game was kept simple in order to improve upon this.

The basic game was intended to be concerned with surface movement with skin and kicks and punches. The advanced game is about the ne ves, vessels, and muscles behind such activity. I tried to arrange a balance of forces so that the system is loose and the player remains the brains. Nothing is completely random, and nothing happens irrevocably. There is room for maneuver and repair. While some procedures are automatic, I think the rules successfully characterize them, and ido not think the player is left with feeling of arbitrary design
some implicit assumptions in the design were not stated, however here they are: 1) governments deTotalitarian gasis of concensus. Totalitarian governments differ with democracies in the numerical base of the concensus. But not are correct given the col viewpoints in which they al viewpoints chronistic. 3) There is alway eft wing and a right wing-if substantively, then concerning no technique of application 4) something for nothing yields motting status than getting something for something. 5) Mass government is matter of effect 6) Money talks

The design of the advanced game went very smoothly, and ther is little new in it, except the idea of linking defense policy to
political party. Though it happens in the real world all the time, I confess I am still proud of finding Given a universe in which 'subversion" occurs, it became imperative to use visible sliding scales to represent socio-economic factors, rather than private record sheets or some other arrangement (and not simply to facilitate play) you don't (you don't do this, I know, but I to be free as 1 can, and I wanted to be free from temptation). Secondparameters that they such gross considered secret inf cannot be on-planet status, any competen social sciences be sial would values in about on hour. The scal the absolute minimum you need to know

I should mention that subversion sounds naughtier than it might be. Gigabucks are a quantification of human effort, so it would be legitimate for you to consider version not just as arms or bribes but as the spread of social ideas or religion, or dope smugg1ing, or whatever template the player uses to intertwine with fate.

The advanced game is homologous to recognized contemporary problems: arms races, economic develop ment and resistance to it, multilevel international aggression, rebellions and revolutions, deficit spending and inflation, "changing" governments, etc. Alas, the real world is so delicately balanced that what would be an inconvenience in the game world is total disaster here on Old Earth. That, I submit, is a scarey thought

In correspondence, Ben Ostrander suggested this article be on the influences behind the overall game concept. I couldn't get a handle on it: Vietnam? Student activism? Student quietism? Watergate? Black militancy? Chicano militancy? Female militancy? Patty Hearst? B-1 ebates? Ben did mention books, and there are books, of course. If you about what influenced article , here's some raw material.
iction: Ursula Le Guin Joseph Conrad, H. G. Wells, Isaac Asimov, Christopher Marlowe, B. Eliot, Cordwa tapledon, George
. Non-Fiction: Michels, Politi
cal Parties; Berger \& Luckmann, Social Construction of Reality Boulding, Conflict $f$ Defense;
Horne, The Fall of Paris; Pitzgerald, Fire in the Lake; Duttwak, Coup D'Etat A Practical Handbook; Kateb, Jtopia $\bar{G}$ Its Enemies; Asprey, War in the Shadows; Rich, Collected Poems; Barnet, Roots of War; Maxwell India's China War; Turnbull, The Mountain People.

On the whole, I'm pleased with the game. Development and play testing kept intact as much of the original design as I could desire.

Godsfire underlines basic political relationships and capabilities in a simple fashion. It is not snobbish $1 y$ detailed, but it can force you o evaluate common activities, both while playing it and when you emorge, bleary-eyed, in a place veryfar from the Narymand purple glare of Godsfire.
Codsfire rule questions, I would be Godsfire rule questions, 1 woul Aad to answer them by mail. My Francisco cu 94115 can't help with "best move" problems, since don't know the answers. You'll have to decide that yourself, and then write an article about it for TSG

## PRODUCING GODSFIRE

or, there was this big envelope, see...
by Steve Jackson

It was late September, more or less, of 1976. I was sitting around the Metagaming office, trying to recover from two months of working twiters 1 still "gold piece" And why was Howard grinning like that?
"Okay, Steve, wake up," he said or something equally cheerful and asinine. "I've got a reward for you. For doing such a good job on MM, you get to work on a new one. From atop a filing cabinet, he pulled a bulging cardboard envelope labeled Wars of the Narym, and extracted a thick sheaf of yellow paper.

I leafed through it. Forty pages, give or take. I twitched. Howard was still emptying the envelope. Several bags of counters (about a million). A bunch of sheets covered with geometrical designs. Three combat results tables. Two enormous maps covered with purple-and-yellow hexes and black squares. I screamed and dived under the table.

Three days later, I woke up at home. The envelope was sitting on the table. Shaking my head, I
began reading the rules
Three hours later, I was muttering to myself and moving counters und.
Six hours after that, I was a oot deep in notes, sketches, empty Next day, and other garbage.
Next day, I got Howard on the never tried, "Hey feat, if you've arym thing? It's got possibili ties.

That was how it started at this end. Actually, the biggest change we made was the name - from Wars of the Narym to Godsfire (after the ourple hypersun that appears to fry you when. you exceed stacking limits.) The rest was just debugging - making an already good game better.

Two things became obvious. First, we were dealing with the best combined political/military simula tion game we'd ever seen. Second it was so long and involved that the average players would have trouble finishing a game due to sheer lack of time. After all, job for a real war a fime Job for a whole nation. Lynn's So our fforts went a too well fying the accounting while setain ing the basic complexity. Thi wasn't supposed to be a simpl game - but it needed to be finishable.

After some playtesting, it began to work a little better. Lynn's original two movement phases per turn were cut to one, and the initiative system (a truly great idea) was simplified somewhat. One of the original three CRTs was eliminated, and the combat abilities of the three unit types were changed somewhat to make them more nearly equivalent in value.

The most annoying problem with the whole game was the distance factor. Lynn was in California; we were in Austin. When we didn't understand something, we couldn't just call him and ask. On the other hand, we couldn't just throw it out and rewrite without understanding; the game was too intricately woven for that. So, every so often, something would come up to force us to beat our heads against the wall, hoping for enlight enment. Sometimes it came.

This eventually made for a better game, just because the "hard parts" were so much mulled over...and it made me very conscious of the need to make sure rules were unambigous and to provid irritating. That is the rimes swore off games from "outside" designers (although if and when something as good as Godsfire comes
in, the resolution will go out the window. So it goes.)

Playtesting Godsfire was intersting, just because the game was so long and complex. It certainly taught us a lot about the frustrations inherent in the game; some we removed, some we gleefully left. There were times when, without ever contacting an enemy, a player would find his economy collapsing and his systems in revolt. (We left this in.) In one game, Robert Taylor conquer a small neutral system hich "played itself." He hadn't rought quit enough force; it $k$ rooting up his SODs and AGs kept hooung taking enough attrit without taking enough attrition to matter. We made the neutrals much. Expansion isn't easy Then there ion isn't easy. oward Susan was the session when oward, Susan Tunnell, and I were a bottle of wine. We felt like playtesting, but there were no short 3-player scenarios.
"OK. The heck with it. Here. You take Chula, I'll take Grom, Susan gets Huacho, and we'll fight over vand. pour me some more.
"Great. What has Vand got?"
"Women."
Susan hit me.
Oddly enough, it played well, so that setup (with a somewhat different background) became Scenario Two Once we were satisfied with the rules, the next step was the graph ics. And that was another real the physical quality of that mportant Not just that it's i readable, and won't fall apart after you play it twice - but that the physical components add to the "feel" of the game, and help you get into the proper frame of mind Godsfire is a big game, with
ot of components. Which meant a lot of work, but all the more opportunity to get people thinking as though they lived in that futur universe. In fact, it starts as soon as you pick up the game and look at the cover.

We gave the basic idea to two rists: a stadium, where a politi al rally or debate has degenerated into a riot. We chose Elrohir's because it was exactly what we wanted to tie both halves of the game together. The perspective is perfect... in the foreground you see the citizenry and police working each other over, while the politicos scream at each other on their podium...and, overhead, the ig viewtank shows the ships moving
in. I only wish the game cover had come out looking a little more like the original; Elrohir used some luorescent tones that the camera didn't pick up.

The other version of the cover the one we didn't use on the game is on the cover of this magazine The cover is the most impressive thing about the booklet; the interior graphics were drawn from the counters. I had quite a bit of fun on those counters. I wanted designs that would be readable, and different enough that no one counter would be mistaken for another - but pretty. After all, if you re going hips and an interstellare ought pa
ton
or the SQD with a ship design for the ${ }^{2}$, and a for the AG, appearing 1,2 , and 3 times on the the PDFs, I had my choice between men, rockets, big guns, or "ray men, rockets, big guns, or "ray units" - so I used all four on the Probably the most work went into the two big sheets that cut apart into system, NG, and data sheets. Playtesting quickly showed us that the system and NG sheets had to be small. The ones in your game look much like Lynn's originals; they've just been redesigned and shrunk, so you can put a halfdozen in front of you at once. Actually, I think that next time we do a game this big, we'll go back to tally marks on a small sheet, rather than having the play ers move indicators. Not as neatlooking, but easier to fit on a table.

One other touch was the individualized system and NG sheets. Originally, all the system sheets were to look alike - but then it do two differ we could afford to meant that each individual - Which could include planet and national government designations. So ional went crazy on them ach system sheet now includes the name of the planet, and a map.

Ah, yes. The maps. Lynn's original sheet design included a central circle for ground movement, but it was blank. It seemed natural to make it into a map - so one night, working alone over the light table, I started work. And that was a TRIP. Have YOU ever created sixteen worlds?

The national government sheets don't have names (there are too many different scenarios), but each one does have its own symbol,

and each symbol matches the NG counter for one set of units. A nice touch, I modestly admit.
Then there are the Data Sheets. These were included because, in this game even more than most, you need reference copies of the CRTs, sequences, etc. In spite of everything, Godsfire is a long, complicated game; we did everything we
on the whol move faster.
succeeded; I'm happy with Godsfire,
and I think Lynn Willis has reason to be inordinately proud. The early scenarios are fine proud. The early player, two-to-three-hour tames but the real fun comes when you round up a whole group of worthy opponents and spend the whole day playing. (Elsewhere in this TSG, Robert
Taylor describes one such marathon.)
I hope gamers have half as much fun playing Godsfire as we had in getting it to press. If you do I'll be quite satisfied.

## GODSFIRE

## a partial session

by Robert R. Taylor

On a drizzly Saturday night in February Howard Thompson, Steve Jackson, and myself met at Ben Ostrander's house for a game of GODSFIRE. Ben had a table large enough to accommodate the entire map Initial set-up was about a half-hou Those playing for the first time Those playing for the fir

We played scenario ten with each of us having two systems at the start of the game. Steve's systems were Assab and Zia, Moros and Dasar formed Howard's systems, Ben chose Weribe and Huacho, and my systems were Vand and Grom

My general strategy at the beginning of the game was based on the positions each player held around the map board, and on their abili ties as gamers. Withalmost the length of the map separating Howard and myself, I felt comfortable knowing he would have to go through Ben or Steve to get to me. Howard, a "build er type" in STELLAR CONQUEST, is a formidable opponent. He starts slow, usually waiting until he has a strong base before moving against an oppon ent, but once he gets rolling he is almost impossible to stop. Ben was closest to me, but Ben is rather new to gaming, and while his strategies are sound his tactics are usually weak. Ben made an inviting target, but to move against him would expose me to my biggest threat--Stcve. Like Howard, Steve is a tough opponent. He plays a very detailed game, and he always surprises me with his unorthodox style. I knew I would have to watch him closely and counter everything he did.

My strategy was to play a de fensive game, and wait for an oppor tunity to present itself. I had hopes that "opportunity" would take the form of a mistake by Steve, but things didn't turn out that way. In fact, my strategy fell apart around turn two, but into the fray after short pause for the uninitiated

GODSFIRE is similar to STELLAR CONQUEST, but one of the major dif-
ferences (among many) is the social interphase. Unlike SC, where if you want attack ships or escorts you sf 1 of mirm units you purchase is determined by the political party in industrialized.

Industrializing a region is a difficult task; placing the correct party in power and maintaining it is also hard to achieve. But without a balanced mixture of political part ies, and therefore, a balance of military units, your actions and strategies will be limited.

Of course, this juggling act can be made more difficult by your opponents slipping money into your system and attempting to subvert your political parties, and there always the danger of revolt (nasty things) which will usually require military muscle to quell

And so it goes
As you see, GODSFIRE requires your strategic concepts to be framed within your political structures. Generally, victory will belong to the player that has the best political setup combined with a good overall strategy with the usual adherence to tactics and timing

Howard, the old master, proved this point quite well during the game.

Turn-1 My initial political situa tion is good. I'm top heavy with moderate political parties, but should be able to industrialize quickly. Howard surprises me and Steve. He has sent 3 SQDs toward Zia, while Steve has shifted most of his forces to Pirr. I position the bulk of my ships. around Grom. Ben has set up a simple screen of ships around both his systems.
T-2 Howard's 3 SQDs continue toward Zia. Steve doesn't consider them much of a threat since he moves more of his forces to Pirr. I move almost all my ships into a tight defensive position around Grom. I think Steve is trying to draw me out. Ben is
shifting money from Weribe to Huacho His forces are still screening his systems
T-3 Howard and Steve fight a small battle between Assab and Zia. Howard overplayed his hand, and Steve detroyed 2 SQDs at a loss of only ttack Steve, and wait to see if will pursue Howard. Ben is still sending money to Huacho, and he has moved his ships into a wider screen around his systems.
T-4 Steve doesn't pursue Howard,
instead he resumes his stationing of orces around Pirr. Howard has backed off, but seems to be getting his
forces together for a stronger attack on Steve. Ben's ships maintain their positions, and $I$ follow his example. T-5 Everyone is industrialized
Ships have sprung up on all the sys tems. Steve sends more of his force to Pirr. Is he seriously going to attack Pirr, and attempt a pacifist victory? Ben has quit screening his systems, and is maneuvering some ship toward Vand. Now I must balance my orces between Steve and Ben. Howard appears to be taking an interest in
T-6 My political situation is very good. I was able to change the party in one of my industrialized regions from moderate to extremist. Now I can build SQDs. Howard is beginning to vector his forces toward Soont It appears he is duplicating Steve's action around Pirr. Ben has made some minor movement toward me. I'll force him to attack early with a small thrust toward Haucho.
$\frac{-7}{\text { ened }}$ Sy eve is starting to feel threat ened by Howard's forces around Soont I believe Steve is about to abandon his attack on Pirr, and concentrate on Howard. Howard has left himself exposed to any movement by Ben, but Ben continues to maneuver toward me I attack him between Huacho and Tufan, and destroy two of his SQDs and lose one of my own. Ben has th best political make-up, and he's making full use of it. My political situation is static, which is good, but i need a reactionary political party so that I can build PDFs Apparently Howard can't build PDFs T-8 H, and Steve can't build SQDs forces qui has positioned his either Assab or Soont Stevesk three Assab or Soont. Steve sends board. Perhaps the middle of the vantage of Howard' sopes to take ad Ben and I tangle sexposed systems AG, and destroy two more 1 SODS. I would like to Ben and see if he and Steve might join forces against Howard. Another
option would be to attack Steve at irr, and see if Howard would als change my political setup, but I'm under so much pressure that would be risky Maybe next turn famous last words.
famous last words.
dance around Soward continue to again concentrating forces steve is Ben disengages from me at Tufan, and I'm happy to see him go. I need the time to work on my political situation, but I have the feeling it's about to hit the fan
$T-10$ Surprise. Howard attacks Steve at Zia. A beautiful stroke by the old boy". Steve's National Govern ment flees with the treasury to Assab. Ben and Howard form an alliance. I decide to come to the aid of teve, and dispatch my main fleet to ia. I leave a thin screen of AGs around Vand and Grom
-11 Howard is wreaking havoc on Zia. fe will probably reduce Zia to subistence level if Steve doesn't reapure it soon. Steve's 3 AGs have penetrated to Moros, and were able to destroy one of Howard's AGs. My fleet and Steve's Pirr force arrive at Zia. Steve loses 3 AGs near Assab, and only destroys one of Howard's SQDs. Together, Steve and I wipe out 3 SQDs and 2 AGs of Howard's in and round Zia. Finally, Ben attacks and. His timing is excellent and his forces outnumber mine by 3 to 1 , but he leaves many of his ships exposed to multisided.attacks. Ouch. was able to outmaneuver Ben, and hit his exposed units with good odds, but the dice failed me. Ben lost no ships, and destroyed 2 AGs of mine
T-12 Howard retreats from Zia. He and Steve are both weakened, but Howard still has the initiative. The battle has moved to Assab. Smash Howard is tricky. He suckered in Steve's forces, and wiped out six of Steve's SQDs, but Steve destroyed three of Howard's AGs. Also Steve's AGs near Moros have pulled off some of Howard's ships from the Assab theater. Ben's fleet has surrounded Vand. Again he leaves several units exposed, and again I attack at good odds. Ouch again. I lose 2 SQDs and 2 AGs while Ben loses nothing. I'm being whittled away.
Tole Steve is able to return his NG to Zia , and begins to restore the is holding his of the regions. Howard is holdind ind lose fight Their lockedin a 1 SQD and Their losses are equal near Moros escape Howard's home force, and destroy another AG of

Howard's. Ben tightens his grip around Vand. My main fleet is coming to the rescue, and I should be able to drive Ben off, but my losses are high. I destroy one AG of his, while he wastes 2 SQDs and 1 AG of mine. Sigh.

At this point with our supply of munchies and cola depleted, the clock edging past 2 AM (I told you guys, we got to start at 8 AM not 8 PM), and our eyeba11s red and swollen, we stopped. Exhaustion was the victor

Actualiy the consensus was that Howard enjoyed the best position when we called a halt to the game. teve would have to rebuild $Z$ ia before he could launch an attack toward howards territory. bending a defiso Howard could pull ite advaci ith high degree of success, and ith a therefor for course, he could have always pressed our had a high degree of success since
he was outproducing Steve by 2 to 1 in military units

And although Howard never produced any PDFs, he never lacked for them. He bought them from Ben. Howard reads the rules, and under the heading we docided it was within the . We duy from another player ules oo buy them from another plays long as thelanced by the amoun ystem was balanced by the amount per index of the regions on all enter drop for each GB difference
drop In hindsight, I should have in hindsight, I should have while Steve would have been better off attacking Soont, and guarding against Howard. Ben played good strategy, but he should have moved against Howard when Howard hit Zia As for Howard, it's hard to find fault with a winner, but once Steve committed the major part of his ships to Pirr, Howard would have had an easy time with Ben

At any rate, the game was well played and enjoyable, and in gaming that's what really counts.


# CHiTiN: I <br> THE HARVEST WARS 

by
Howard Thompson

Kkha-nu-Z1ek's Spyder mount chittered beneath him restlessly from the pre-dawn chill. Kkha thrum med peaceful thoughts to the Spyder with his brood meld brethren. Full concentration was necessary to keep the force moving Brutish warriors loved the warmth of hive far more than the cold of an early fall morn The sun would have been well up be fore the hulking Gantuas and testy Phlanx thrusters would have moved their own. Strident urgency harried the Zlek meld's harmony. Hive fied the zlek were low from the large popu lation.

The zlek meld had been trained as a command team even before writh ing from their cocoons. Kkha had been attuned to Zlek as a replace ment this season. Zlek team was four seasons old and one of the more suc cessful combat command melds avail able to the hive mothers. Kkha was part of a novel attempt to replac meld loses instead of vatting meld survivors when their numbers sank too low for effective melding. Kkha was less Hymenopteran and more an indi vidual than usual, being added to an existing meld of Basics. His usual training would have been as part of a new meld from the time he was larvae.

The mind linked $Z 1 e k$ meld urged their warrior ranks forward at maximum speed. They had been moving eight days, ever farther from the closeness of the hive mothers. In the mall valley ahead, the huge Vlaros plants with their sprawling root ing nould be ready for harvest but fighting would win it. Mentations of
enemy command melds whispered even now in the Zlek mental net. Other Termagants and Low Render warriors waited ahead in the irritable cold. Other workers sensed the ripened laros pods and longed to drag them sing musk of the hive rs.
Kkha wanted Vlaros and bodies to please, warming from the mothers too. Winter would be stark without a maximum harvest success given this year's bad weather Kkha wanted food wanted to kill hated enemy warriors and wanted the love and growth of th mother's hive. Kkha want grawh for himse1f. Himself was an alien concept despite his unusual melding Self meant nothing unusual melding when he acted independently The hive was all and thendently. The hive was all and the Zlek team was pride of meld wasn't his but alls.

To say that Men and insects differ seems as obvious as stating that night follows day. To gain a real feel of what that difference would mean as an experience is difficult. Men are individuals who are never sure that their perception and experience of existence is at all similar to that of any other men. will never know what a society of sentient insects will be lkie to its non-individual members. They probab$1 y$ don't have anything like a personal, individual sense of themselves. We can speculate for fun and know ledge and 1 earn by observation.

Hymenoptera, like Stellar Conquest, is based in a game that amusement. Since it was done for fun
and at an age when heavy thinking wasn t important not much thought was given to the hows and whys of those insect societies. They had space ships, individual personali ties, and "human type" tool use and motivation. That blithe approach is certainly idiotic. Those Hymenopterans were created, and now revised with the expectation that bugs could do anything humans can do, but diff erently. Chitin I is a tactical abstract from the to-be-published game Hymenoptera and reflects the physiology and psychology of Hymenpterans

Hymenopterans have fair infrared vision but poor sight in the human optical range. They see fairly ell close up in sunlight and pass ably well in the dark. They see etail poorly and at a distance not smell far surpasses men's. A third mev Tek only need smell a compl evel ubstance and taste it to have a Their hearing extends a bit below the humen low and higher than that o dogs. This combination of acute hear ing and smell lets Hymenopterans sense and accurately identify ob sense and accurately identify humans, even though the object may be out of sight and at farther distance than humans readily perceive.

The excellent smell and hearing coupled with poorer vision gives Hymenopterans a different perception f objects than man. Their experience of objects is more sensual, more organic than man's. To man objects are solid, more visually sepa rate from our person. Hymenopterans see their world less but experience it with far more detail of sensa tion. This sensing difference is accentuated by relatively poorer physical co-ordination and dexter ity. Clumsy handiing of artifacts gives them a view of objects as some thing to be sensed and experienced rather than as something to be used and manipulated

So far Hymenopterans sound sort of semi-human. Psychologically the difference is vast. Hymenopterans on't have clear individual identifor A personal ego is not possible for a race that never truly recog hive membership. They don't learn -object relationships as much as humans so Men are natural tool users and manipulators. We are ob-ject-oriented to our world. We manipulate and control our envir ment through control our environ jects. Hymenopterans think of objects less as something to be used
nd more as something to be experi enced and identified. They use tools sparingly and with poor efficiency. They don't have missle weapons in war. Poor vision, co-ordination and object sense never gave rise to the concept of throwing an object.Thrown objects meant to intersect the course of another moving object will be a distinct surprise for the first Hymenopterans to encounter humans. They will, of course, develop missle weapons from these encounters but from an entirely different approach and viewpoint.

Hymenopterans will have a few surprises for man, too. With their telkinetic capacity, arising from enhanced brain function for sense of smell and hearing, we re in for our wnergy output will be sufficient for nergy output will be sufficient for ient for the development of a bioechnological civilization. And this eche ESP bility eventually gave them same ESP ability eventually gave the hive planet Chelan.

Man will learn that long term Hymenopteran captives are no longer human. We will also learn that captured pregnant women become horrors They also become the instrument for the first successful breeding of humans with aliens, though you'd never ever want to meet one.

Scent of ripened Vlaros wafted up the mists as Eloina's first warm ing rays pierced to the valley floor A thrilling eagerness went through the mind net of Kkha's meld. The march had been made in time! V1aros would be their's, if they fought well for the hive mothers. Rasping trills began from the workers as they too smelled V1aros and began to press more rapidly forward. Hold! Hold!, went mentally speeding out to the workers from the command me1d. Wait! wait, til warriors crush the thorax chitin of hated enemy soldiers. Wait! Wait, til the way is clear to the Vlaros mound-stalks. Norkers waste service with useless deaths. Living to present viaros to our worl wait dumb eager ittl nate. Wait brothers.

With the sun up and V1aros ready the battle develops swiftly Zlek meld sends swift Termagant skirmishers to center and right to hold and cover the Vlaros stalks. The center of the valley has some low hills and heavy undergrowth where several small streams join. Low Renders are sent in a leftward sweep

down the valley slopes and in to the center where their low, scuttling agility can be effective in the rough terrain. Kkha moves with a sub meld to the right leading a strike force of Phlanx thrusters. Zlek smasher Gantuas move to the center behind the Termagant screen while Low Renders moving to the center in support. Flyer plunges will soon awaken from their warm nights nest ing , to come diving to the fray. If
Bas know any fear it is of flyers
swooping down to kill them as battle field controllers

Musky odors of the enemy are now maddeningly evident. Mind chitterings of the enemy command me1d whisper, if strangely, in Kkha's Basics to their killing charges. spite lingering chill the warriors now need little spur to move. The violent warriors now need control to avoid frothing, berserk, killing lusts that shatter any cunning battle

On the right, where Kkha approaches, Termagants clash with Teragants and the 21 ek force retreats rom the V1aros stalk to regroup old! Hold, Kkha's meld link cries! Battle swirls on the left and is soo o join in the center. Kkha feels lek Termagants readying a new counNait! wait! until....now.

Even the poor eyes of Kkha's group can now see the huge, central stalks of Vlaros. Enemy Termagants are sensed waiting, but no enemy workers are yet in the Vlaros. Hold again! meld brothers, Kkha calls, to our left come Gantua smashers

Kkha's sensings are true. Coming rom the center to the left of his group are a full three mandules of enemy Gantuas in thudding, humping harge at the regrouped $21 e k$ Termag ants. Zlek Phlanxes with Kkha re quire concentrated holding as the small Z1ek Termagants are pounded to jelly and scattered by the enemy antuas.

Soon the huge Gantuas stand exhausted from their fearsome rush. The Zlek Phlanxes are only now released in a furious counter-charge their own. Slowed only by the s surge forward in surge for the Gantuas barely weighty spikes. The Gantuas barely The wil of phlan points stabs deep The wall of phanx points stabs deep Huge bodies are speared thoraxes ripped, legs severed. The Ph1anx charge drives home to break the nemy Gantuas.
Already counting the victory of the charge Zlek workers move in
toward the Vlaros. The surviving lek Termagant mandule moves in with f Phlanxes moves in support of Termagants and straining workers Surviving enemy Termagants hold briefly then puli back to make a line with the enemy Gantua remnant.
Ahovel Ahovel chrieks

## in Kkha's brain! But, it is too late. Enemy

 plunges are already swooping down in attack on Kkha and others of his in attack on Kkha and others of his and die. They were left exposed by the Phlanx charge and pay for the lapse with their 1 ives. Command con trol of the Zlek force on the left is briefiy endangered until the humming wings of Zlek Plunges enter the struggle. The airbourne attack is short and gory but enemies are repulsed.ro victory-high Kkha felt from the Phlanx charge fades. The Plunge's surprise assault on the lek command has provided the others with regrouping time. Some hive work ers have been killed trying to approach the V1aros. Enemy hive work ers have also appeared. The hope for a quick grab of the viaros has now dissolved into a desparate, bloody braw1.

## ***

Chelan is the fourth planet of the $F 6 V$ plimary Eloina and the hive lanet of the Hymenopterans. Eloina as a solar luminosity of 2.0 , a olar mass of 1.2 , surface temperaure of $6,300 \mathrm{~K}$ and a $\mathrm{B}-\mathrm{V}$ color index rating of +.44 , yellow toward whitrating of in color. The other stars of the

system are a $K 4 \mathrm{~V}$, Ruhnd, and Mrysia, an M2V spectral class star

Ruhnd has a .35 solar luminosity with a 1,650 year inclined elliptical orbit around Eloina. Mrysla has a solar luminosity of .001 and is in a near circular orbit around Ruina with a period of 434 years. is six light hours and the rareclos est approach to Mrysla is three light hours due to the 34 degree difference in the inclination of their orbits around Eloina. The Hy thenopterans are blessed with a mul tiple star system which has the primaries far enough apart to pret vent major dislocations to planets in inner orbits but is compact enough to allow exploration at technological level that would fail reaching stars as distant as even a few light years.

Chelan, with a diameter of $15,000 \mathrm{~km}$, has a lower average density than Earth's, which gives it a surface gravity of . 82 Earth normal. Sea level atmospheric pressure is about 50\% greater than Earth's at 221 ber square inch. Chelan has held more of its original atmosphere since the mass of its three moons is much less that of Luna with the largest Chelan moon having a diamete of only $1,700 \mathrm{~km}$. The thicker atmosphere and lower gravity of Chelan combine to make it relatively easy for heavier flying creature and plants to evolve. The height range for unmutated Hymenopteran flyers and floater plants is in the $15-20 \mathrm{~km}$
range. range.

Tectonic activity on Chelan is rapid and violent. The low planetary density and small lunar gravity pull activity much low a level of tecton However Ulipa, the next planet ou in the , of $65,000 \mathrm{~km}$ with a mass forty-one times that of Earth. Ulipa orbits an average 315 million kilometers an average 315 million kilometers and farthest approach to Eloina. With a planet of almost half Saturn's mass that close to Chelan, (and occasional passes even closer) it's surprising that Chelan doesn't experience earthquakes even more violent than the 9-11 Richter scale disasters that occur yearly. This recurring earthquake activity coupled with many active volcanoes is, as would be expected, disruptive to Hymenopteran cultural and social development. Mountainous, rough terrain would be even more common if it weren't for the rapid weathering rate of the thick, Chelan atmosphere and violent storms. The 22.53 hour Chelan rota-
ional period coupled with a Chelan quatorial circumference 15\% greater than Earth's yields a more rapid moving and mixing of the atmosphere despite the greater relatively density. What would require 100 million years of tectonic weathering and ac tivity on Earth is accomplished in 10 million years on Chelan.

Oceans account for only $52 \%$ of Chelan's surface area. This leave the Hymenopterans almost $3 \frac{1}{2}$ times more raw land area on their home pla net than man. A higher percentage of flatter area isn't arable for the latter area isn t arable for the major food staple strains of viaros

This then is the home of the
Hymer, more physically violent, and more supportive of evolving, air life-forms. Up to the time the games Chitin I and Hymenoptera begin, evolution among the Hymenopterans was nearly stagnate. There wasn't much evolution culturally or physically beyond the existence of Basics with some differentiation into worker and warrior types. All they had going for them was a gradually improving ability to manipulate very tiny masses telekinetically. The dawn of the Hymenopteran bio-genetic revolution sprang from some unknown genius first fumbling attempts to alter DNA and RNA structures in fertilized eggs. It doesn't sound like a lot but it proved more than enough to insure Hymenopterans a place on the galactic scale a millenium later.

The day of strugg1e had worn on long past noon. Overhead flights of gliding, stinging plunges had rein rolling air death dances Half in roling, air death dances. Hal dead. Workers of both forces coninued inud roplacing worker dead who'd failed the hive mothers. Most of the laros and corpses were still in con test. With each side able to muster less than half its initial force of warriors much as left to be won or lost.

Kkha's soldier bred mind sufferd the melding nulls of his dead brothers in silent urgency. Zlekmeld was almost done this day whatever the outcome. Kkha and two brother Basics now pursued a group of enemy with laros without regard for the now chaotic melee. The motley, ragged group pursuing was a mixed gathering f Termagants, Low Renders and an in tact mandule of Zlek Gantuas. As they closed on the escaping workers and.

the precious Vlaros a few Plunges dropped in to kill the last of the zlek Basics with the group. Afrantic weaving and bobbing of armored limbs and abdomens insued, desparate and wild. When the dust of the small tumult cleared one Basic, four Plunges and Kkha's Spyder mount lay groaning and broken. Kkha's middle left appendage had been ripped from its socket. Slapping mud on the seeping ooze he mounted a Gantua.

The fleeing workers had gained a little time but not enough. The exhausted them with abandon, risking the death vest urge is on them. The vlaros had to be stopped here or it would be too far for the 7lek workers to reach.

Soon, there was but a pile of fresh bodies and Vlaros stalks surrounded by the surviving 21 ek warriors. A party of enemy Termagant with a few Phlanxes drew up to ready an attack. Kkha ordered a force for defense with a detachment to the south as cover for the approach of some Zlek workers. The attack of the enemy drove home before the workers could arrive to move the food closer to the home hive. Kkha waited until the last minute then sent one of the surviving Zlek Plunge groups down on enemy Basic Cognates as the battle joined. After some frantic killing and a $21 e k$ Gantua counter charge, the battle was over. A few enemy dragged away, no commanders to control them.

Kkha surveyed the battlefield, now hung with haze, from the back of the restless Gantua and saw that duty remanded him to guard the V1aros he had. Workers were soon among them lifting up huge loads to carry meld net, Kkha knew Zlek was done
from this short day's war. Kkha whip ped the minds near him to even more speed. The deaths gone would be wasted if the vlaros and bodies weren't removed quickly from this spot.

Hymenopterans seek and hoard food above all else. Food is the ever present constraint on hive expansion expand population at a $50 \%$ annual expand population at a sor annual for rateir young so the Basics get it for them. This is the whole rationalo of Hymenopteran existence.

As a game, Chitin I portrays the harvest war phaseasit was in the early stages of the Hymenopteran bio-genetic revolution. The prime directive was still to harvest the Vlaros, this despite the startiing advances in mutated workers and warriors of all kinds. Even as Basic cognates began to mutate smarter and more capable versions of themselves, obtaining as much Vlaros as possible with all speed was still the rule. The seasonal wars were rampant for nearly a hundred years after the development of the first genetically improved warrior. The wars only ended when the mothers of a single hive had established their sisters over the entire planet and all others

The Basic cogna
The Basic cognates are the sentients of the battlefield and have management. Possessed of telepathy tive mindod they direct the primito killing themselves if lift unman to work and firs are more intelligent than warrior bypes more don't though they do take direction from

Basics. Workers and F1yers have the ability to operate independently as required, though with less intelli gence than if directed by Basics Warriors without command contro won't move far, act defensively, and are far less effective.

Advanced victory conditions of Chitin I reflect the food value of the hive members themselves. It is of a harvest yet lose so much protein through battle dead they suffer a net loss of food energy. Workers grab bodies as well as Vlaros when battle rages. Both are food for the hive. If Hymenopterans have religion or soul belief it would include fervent longing to end in their hive's own food processing vats to be ingested by their brothers and be again with the hive. It is perhaps the only religion for insects who are smart yet consider themselves as one with the whole community.

The long, exhausting day was finally drawing to a close. Basic, last Vlaros warriors had carted the last slopes and skirmished with the sor fragmented 21 k remnants barely time to make an evening camp outsid the valley before sundown's cool crept into their bodies through their wounds.

Zlek had won a fair sized victory in terms of food value hauled from the battlefield. This year's harvest was poor, as predicted. But most of the hive would be allowed ife through the winter to a new pring. In the frequent bad years, It mattered 1 ittle that only thirty percent of the Zlek led force
would return to the hive mothers. It mattered little that the Zlek command meld was irretrievably smashed beyond rebuilding. What mattered wa that the hive had food for the winter and
trophes.

When the dawn of the next morn ing broke, Kkha didn't ride but was carried as food, dead, by a worker. iils mind was still alive, but his body was shattered and rent. His glory had been in some last rear guard actions covering the movement of workers to the rear. It was combat of death, but they knew it would buy a bit of precious time for the workers, and a counter stroke. Kkha and the others gave that time and their lives in joy for the hive mothers larder.

Despite a still living brain, the $21 e k$ meld survivors ignored Kkha Those useless are already dead to those who can still give active service to the hive. Kkha knew himself dead and did no more than ne the homeward march hiver through the days and . He lived through the days and nights of bumplived through worker siclasp. H musky corridors of the hive the ed to sense the near forms of thiv hive mothers welcoming those survivors who worshipped them with the food of their victory

He lived, for a moment, as his husk was dumped into the vats of the hive. As the vat's food acids lapped over him to melt his flesh, scale and skeleton into food stores his ast thoughts were of serving.

ALL GLORY TO THE HIVE! ALL WORSHIP THE MOTHERS! May my flesh nour ish you, my brothers, that I may live again through you to serve the hive. May your life serve the mothers as has mine. May you end with the love of final service as $I$.

tance of colonies in extending ship range and the need for technological development to increase mobility be come relatively more important.
There is an obvious need for Level 4 technology, again due to the greater distance and scope involved.

Explanations of new technology: built in any one star system. A SGA has the capacity to transfer up to three ships per turn through an arti ficial space warp to a distance of 11 hexes. A ship can move up to its full movement allowance to get to the stargate and be shifted up to 11 hexes in any direction in the same turn. If the player has Un1imited Ship Communications, the gate can reach out to a distance of 11 hexes warp a ship in, and warp it out to another hex in the same turn. A stargate can be erected in a con quered system by the conquering
player. In battie, a stargate has the offensive and defensive strength of 3 DN 's and can fire at three separate targets if desired.
A GATELINK (GAL) consists of 2 or more SGA, located within 11 hexes of each other, linking themselves in a chain so that a ship moving into the first is warped out of the last to a distance of 11 hexes in one turn. Enemy stargates cannot link, nor can they be used by an opponent's ships. A stargate can only participate in a single gatelink per turn and while gatelinked, cannot perform any other shifting. Any damage a stargate takes in battle can be repaired during the next production year at a cost of 20 IU per hit. (It takes 3 hits to destroy a stargate. Once destroyed, it can only be replaced at the full cost of 80 IU. Until repaired each hit reduces its offensive/ defensive strength as though it were three separate DN's, each hit destroying one.)

The STARBEAM (STB) is the ulti mate defensive weapon, converting a stargate into a device to focus the entire energy output of its sun into a solid beam of energy, which destroys all spaceborne ships in tha system, both friendly and enemy.

When functioning as a STB, the SGA cannot shift any ships in that turn Forces attacking an STB equipped system have one chance to destroy it, by attacking and destroying the stargate. The defending player, upon learning the enemy fleet's composition, must state whether or not he is going to use the STB; if so, he cannot use the SGA's normal offensive capability.

As the starbeam is the ultimate defensive weapon, so is the NOVA BOMB (NVB) the ultimate offensive weapon. It is planted in a system's star by enemy forces which have destroyed all defending ships and the SGA. The defending player rolls two dice for each nova bomb, with the following results:
$\begin{array}{lll}2 & \text { or } 12 \quad \text {-the device is a dud } \\ 3 & \text { or } 11 & \text {-instant }\end{array}$
3 or $11 \quad$-instant nova
$4,6,8,10 \quad$ -
4,6,8,10 -star explodes with-
$5,7,9 \quad$ in 20 years
To determine the year in which your star explodes use chits num(for 10 years) or 0 to 19 (for twenty years) and draw one which indiurn until the ous drawn, nova. You can reme star just went in DN's and ATK's million and 1 million mif the colony lasts until a producIf the colony lasts until a produc tion year, everyone can be remove are lost.

| INDUSTRIAL UNIT COST SCHEDULE |  |
| :--- | :--- |
| IU cost/Item <br> 80 SGA <br> 55 NVB | $\frac{\text { IU cost/Item }}{40 \text { PFS }}$ |
| 40 STB | 20 PFS/yearly |

55 NVB
40 STB
20 PFS/yearly

* Note that a PFA now costs

40 IU's to construct, and an additional 20 IU's each production year to maintain. If a year is skipped, it is still only 20 IU's to re-erect the PFS.
*A1though not included here, the production of inter-planetary ships as described in TSG \#7 can be adapted nicely to this format.

Concerning ship movement: The counters need to be numbered so you can keep track of them. Even plott ing moves for just the six ships

Level 4 technology:
SHIP MOVEMENT ALLOWANCE TECHNICAL SEQUENCE WEAPONS SEQUENCE

| Sym | Pred | Cost | W/O <br> Pred | Sym | Pred | Cost | Sym | Pred | Cost |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9MA | 8MA | 80 | 90 | SGA | USR | 100 | STB | SGA | 200 |
| 10MA | 9MA | 90 | 100 | GAL | SGA | 140 | NVB | $\cdots$ | 230 |

you start with can get quite involved. Either use the counters provided with STARFORCE or number the fronts with STARFORCE or number the fronts ship designation printed on them. (If you number the SC counters on the back, you will effectively ruin them for normal use. Every time your opponent sees \#13 coming at him, he will know an ATK is on its way.) To keep track of which ship is which, where it is, and where it is headed, ordinary notebook paper can be used as per table \#2.
*Meaning: Counter \#2 represents an escort headed for $3018 /+9$. After the first turn it was at +7 , after the second +8 . It is only necessary to record the zulu coordinates (the ship's location above or below the board) each turn as the ship's two
dimensional location is marked on the board by the counter. Do not use counters for CT's. When establishing a new colony, record it on your record sheet as you normally would in the turn on which your CT's would otherwise arrive. This serves the purpose of keeping your colonies hidden until your opponent notices you building ships there. You cannot use that colony for purposes of extending ship range until the turn afteryour CT's would be expected to arrive.

Don't limit yourself to the instructions contained herein. These innovations of the basic STELLAR CONQUEST game are designed to add scope and realism to an already detailed game. It does make the game longer, but much more interesting.
2 esc $3018 /+9+7 \quad+8 \quad+9 \quad+9$

1515). If, for instance, it moves to 1515, it could then move either to 1414 or 1415 , and so forth.
11.042 The players should note that this rule essentially means that an aircraft can move to any hex in a sixty-degree arc to its front.
11.043 At the end of an aircraft's movement, i.e., after it has expend ed all its movement points, it may change its facing by one hex juncits facing from one hex juncture to its facing from one hex juncture to tures. In the illustration below, the aircraft could change its facing from C to either A or B---or, for that matter, leave it at $C$.

11.05 Aircraft may ignore terrain. They may freely move through crater hexes and rubble hexsides.
11.06 Aircraft may freely move through hexes containing other units and stack with other units. Note that this is an exception to rule 5.02 , which states that no unit may end its movement in the same hex as movement stacked with other aircraft, and/or with ground units.
11.07 All aircraft must move as many hexes as they are able. Thus, an aircraft with (for instance) fiv es. Unlike ground units, aircraft are forced to move their full movement allowance every turn.
11.071 Fighters are given a movement aliowance of 6 ; however, a fighter may move either 5 or 6 hexes, at its owning player's option. This is an exception to 11.07 .
11.08 The only ground-based units that can attack aircraft (aside from AA units) are Howitzers and Ogres.
11.081 An Ogre may attack aircraft with its missiles and with its primary batteries. Secondary batteries and antipersonnel weapons, however, are ineffective against aircraft.
11.082 Howitzers have their attack strength halved when attacking aircraft.
11.09 If an aircraft is attacked and a "D" results on the Combat Results Table, the aircraft is forced that the aircraft's counter is flip that the aircraft ped back'over
11.091 If an aircraft is attacked by an Ogre's missile or a Flying Fort ress' air-to-air missile, it must automatically take evasive action even if the missile attack results in a "NE" on the CRT.
11.10 It may occur that, because of a player's actions, an aircraft is forced to fly off the edge of the map at some point in the game. The players may, if they wish to keep the aircraft in the game, keep track of the aircraft's "imaginary position" off the edge of the map,
keeping track of the number of hexes it is from the map edge. The aircraft must proceed to return to the map as quickly as possible.

### 12.0 BOMBERS

12.01 Bombers are aircraft designed to deliver a load of explosives or tactical nukes to a specific target They do not carry weaponry other than their bombs.
12.02 Each bomber is considered to carry three bombloads, and may
therefore make only three attackes in a single game. After a bomber has made its three attacks, it becomes useless, and is removed from the board.
12.03 Bombers release their bomb loads while moving, not during the combat phase. A bomber may release a bombload in any hex that it moves
through in the course of its move ment. Any unit in the hex in which a bombload is dropped immediately undergoes an attack by the bombload, which is considered to have an attack strength of "6".
12.04 An aircraft may release as many of its bombloads in a single hex as its owning player desires. It
may release bombloads in any pattern at any time during its movement.
12.05 After a bomber releases a bombload, it may continue moving. Attacks by bombers are resolvedin that has not expended all its movement points may continue to move after releasing a bombload.
12.06 Bombs are considered to have no effect on aircraft; they may only affect ground units.
12.07 Bombloads have their attack strength halved (to" 3 ") when infantry units are bombed, because infantry tends to be more dispersed than armor.
12.08 Although when all other units are bombed, a bombload's attack strength is treated as a single unit, as is the fire of normal units (see 6.09), a bombload may split up its attack strength when attacking an Ogre.
12.081 A bombload's attack strength may be split into as many as six parts. The way in which a bombload' strength is split need not be into equal divisions---thus, a bombload's strength could be split into one attack at a strength of "4", and one of "2". Each of the parts of a divided bombload's attack strength may attack a different part of an Ogre: Example: A bombload's attack strength is split into one attack with a
streng th of ${ }^{\prime \prime}$, and four at Tocks personnel batteries.
12.082 Although a bombload's attack strength may be divided, a single weapon system of an Ogre may only undergo one attack from a bombload. Thus, a bombload's strength could not be divided so that, for instance, one weapon system underwent three 1-1 attacks. If any single weapons system of an Ogre is attacked, the system of an ogre is attacked, the attack strength points devoted to totalled in a single attack.
13.0 FIGHTERS
13.01 Fighters are aircraft designed to intercept bombers, and to protect bombers from intercepting fighters. As well, they are capable of strafing ground units.
13.02 Un1ike bombers, fighters make
ttacks in the normal manner They do not carry bombloads, but simply attack enemy units. However, a fighter may only attack enemy units in its forward arc (see 11 usc is ton). A rgshter those hexes that a fighter could a fighter's forward arc is bounded by the two hex rows that can be traced from the two hexes in front of a fighter.

13.021 A fighter's forward arc does nclude the hex it is in; thus, $\frac{a}{a}$ ighter may attack aircraft in its hex.
13.03 Fighters may attack either aircraft or ground units. However, a ighter's attack strength is halved when it attacks a ground unit.

### 14.0 FLYING FORTRESSES

14.01 F1ying Fortresses, also known as Continental Seige Aircraft or ogre Magi, are the airborne equiva lent of Ogres. There are two types of F1ying Fortresses; CSA-10, and CSA-15.
14.02 Flying Fortresses have Movement Points in the same way that Ogres do. Each hex a Flying Fortress moves through forces it to expend one movement point. A Flying Fort ress begins with a Movement allow ance of 4 , and, in keeping with 11.07 , must move four hexes each turn. When a Flying Fortress has ex pended a certain number of movement points, its movement allowance falls
to three, at which point it must move three hexes a turn. Note that a flying Fortress' movement allowance its movement points it expends. Eventually, a Flying Fortress' movement allowance will fall to zero, at which point it is considered to come crashing to the ground, and is destroyed.
14.03 Flying Fortresses have two types of bombs; one type (listed on the Record sheet as Bombloads) are treated in exactiy the same manner as bombers bombloads. The other are antipersonnel bombs.
14.031 Antipersonnel bombloads are dropped in the same manner as regu lar bombloads. However, antipersonnel bombs have no effect on armor units; that is to say, they effect only infantry and CP's.
14.04 Flying Fortresses are equipped with air-to-air missiles. These may only be used on enemy aircraft, they have no effect on ground units.
14.05 Flying Fortresses are equipped with two types of guns-main and secondary. These fire in the same way only be fired in the forward arc of the Flying Fortress.
14.06 Flying Fortresses attack and are attacked in the same way as Ogres. That is, attacks on Flying Fortresses must be directed against specific weapons, and the Flying Fortress is not destroyed until it has lost all its movement points.

### 15.0 ANTI-AIRCRAFT UNITS

15.01 Anti-Aircraft units are ground-based units designed to destroy aircraft. Although they can be used against ground units as well as aircraft, they are less effective when attacking ground units
15.02 There are two types of AA units---Light AA and Heavy AA. Their strengths are indicated below.


LIGHT AA
D2, M1
$6 / 5$
15.03 AA units have their attack strength halved when attacking ground units. They use their full attack strength only when attacking aircraft.
15.04 Note that a Light AA unit has a movement allowance of 1 , while a Heavy AA unit is immobile.

CHART OF ATTACK MULTIPLES:


EXAMPLE OF FLYING FORTRESS RECORD SHEET:

CSA-15

4 Bombloads (6/0;D3) 0000
3 Air-to-Air Missles (6/5;D3) 000
2 Main Guns (4/3;D4) 0
6 Secondary Guns (3/2;D3) 000000
18 Antipersonnel Bombloads (1/0;D1)
Used only against infantry \& CP's

$$
000000000000000000
$$

60 Movement Points
000000000000000 000000000000000
000000000000000
000000000000000
(movement drops to M3)
movement drops to M2)
(movement drops to Ml)
(movement drops to MO; CSA -15 destroyed)

## CSA-10

2 Bombloads (6/0;D3) 00
1 Air-to-Air Missles (6/5;D3) O
1 Main Gun (4/3;D4) O
4 Secondary Guns (3/2;D3) ○○ ○ O
12 Antipersonnel Bombloads (1/1;D1)
Used only against infantry \& CP's

## 000000000000

## 48 Movement Points

## 000000000000 <br> 000000000000 <br> 000000000000 <br> 000000000000

(movement drops to M3)
(movement drops to M2)
(movement drops to MI)
(movement drops to MO; CSA-10 destroyed)

PHIL-CON 77 will be on June 24-26 at Widener College, Chester, PA. Listed events include: tournaments, demonstrations, seminars, movies, awards, and prizes. Games listed SAMURI, and others. For more inforation write: Jay Hadley 918 Harry Street, Conshohocken, PA. 19428.

CINCICON VII is to be held July 15-17, 1977, at the Junior Achievement Hall of Free Enterprise in Cincinnati, Ohio. Events include a wide range of games, abstracts, cyber sports and participatory literature. Examples: Kingmaker, Scrabble, ches, D \& D, TV pong, and SUPERHERO 44. SUPREHERO 44 is a new game of superpowered crime powers beyond human abilities like Superman). Toolmasters (Characters with technological specialities-super Iron Man), or Ubermensch (the "ultra specialist", like Tarzan) For more information write: CINCICON VII, c/o Boardwalk, 1032 olta Avenue, Cincinnati, Ohio 45208.

2,000 stars to 3D mode ( $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$, and top view Polar) in unit parsecs scale; 3D coordinate list for stars within 6 parsecs at $31 / \mathrm{pc}$ and unit parsec scale; 6 parsec exterior frontview key; complete instructions and diagrams for building 3 foot 3 D map of the $80+$ nearest stars within 6 parsecs; 3D list of the approx. 500 nearby stars with absolute magnitude of 6 or less; the working computer program; general advice in starmap design. $\$ 6.00$ US ppd.

A spokesman for TSR says STAR EMPIRES will be available about June 15 th . Metagaming will ship copies by first class mail as soon as we receive our stock.

If you are interested in learning more about the L-5 Space Colonies to supply energy to Earth, contact L-5 Society; 1620 N . Park Avenue; Tucson, AZ 85719. Christine Bunt (Westville Apts. B3-Al2; Farnsworth Drive; Slingerlands NY 12159) suggests writing directly to your Congressmen and to president Carter to make them aware of the advantages of the space colonies She offers to answer questions (send SASE).

HOUSTON WARGAMING CON'77 will be held at Rice Hotel on August 12-14, 1977. Events include a dealers area, 12 tournaments and cash prizes. For more information, send SASE to Southern Convention'77, 2601 Esther, Pasadena, TX 77502.

Available from Theta Enterprises, 114 N . McKinney, Dept. AM Richardson, TX 75080: A Handbook for Building Three Dimensional Starmaps. Includes computer coordinate translations of the entire Giliese Near Star Cataloque of

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## Acquisitions Departmen

The Avalon Hill Game Co. recently announced the acquisition of the entire game line of Aladdin Industries. The six games acquired include Tripples, Deluxe Tripples, Barrier, Per Plexus, Bali and Totally.

The latest acquisition of Aladdin games follows AH's purchase of the Sports Illustrated, 3-M, and Diplomacy game lines. Avalon Hill is pursuing a definite policy of growth through expansion. The wargames segment of the AH line has long been the most profitable and AH has contributed a disproportionate share of profits to the parent holding company. It will be a real challenge for AH to put life into lines that others were willing to sell off. Hopefully we won't see wargamers carrying the load of supporting the new AH acquisitions. It would seem unfair for the wargames to be the profit producing part of AH but not get all the expansion effort. HT


THE SPACE GAMER has been nominated for the Charles Roberts Award for Best Semi-Professional Magazine, winner to be announced at Origins 77 held in New York City July 22, 23, and 24.

Gencon West '77, sponsored by outpost Hobbies Inc., will be helä at Villa Motel; San Mateo, CA; september 3, 4, and 5. If interested, write P.O. Box 4042; Foster City, CA 94404 or call Thomas and Mary Jean Vaughan at (415)573-674 oy June 30th.

Tacticon II will be held July 16 and 17 at Dunfey's Royal Coach 16 and 17 at Dunfey's Royal
Inn; 7000 Southwest Freeway; Inn; 7000 Southwest Freeway; ouston, tournare inf ilber Rd \#329, Houston TX 7702 or call (713) 688-0531.

Michicon VI Gamefest will be held June 3, 4, and 5 at Oakland University, Detroit. Planned by the Metro Detroit Gamers, it will eature Avalon Hill's Tom Shaw, Randy Reed, and Richard Hamblen; ver 25 board-game tournaments, seminars, and more. For further nformation, call Al Slisinger 313) 839-3364) or write him at 19941 Joan; Detroit, MI 48205.

FICTION


## G. E. V.

by Jerry D. Bell

It was two hours before dark when the big show started in the north. On the clouds over the horizon you could see the reflected fireballs and even a few stray
Hiveloc round burning up at the en of their range. The sound of the of their range. The sound of the tance but you could feel the ground shocks through the suspension. hocks through the suspension tions officer hadn't mentioned any projected offensives, which meant projected offensives, which mean But the rumor mills hadn't any poop on any sort of dust up. Now the north was alive with micronukes a north was alive with micronukes and wrong.
"Mateland!" I was sitting on the forward glacis of my buggy, catching some fresh air, when the
north lit up. I hammered at the hatch over the driver with the butt of my side arm. "Mateland, heads up."

He poked his hat out of the hatch, blinking at the light. I could feel the hover tick over under me. "Trouble Jake?"
"North."
He looked over that way, then turned back to me. "So?"
"I've got a feeling about that dust, tell the troop to prep their buggies for micks." I slid down and blew my nose clear. We'd gotten dose of some Virus-IV about six had left me with a constant cold.

Copacetic Jake, but if it's a zilch you'll get a horselaugh.' should slung my sidearms over my ruins to our 1 ft to the MI topkick who's lot were
bedded down with us. "Prep them tell the other troop they'd better get up too. I'll worry about the laughter later." The ground was mer and churned to a powder from us and the Micks. The MI had dug in between a smashed up church and three Mick heavy tanks that had brewed up when we took the place about a month ago. The top was standing out by the tank that had the three Micks melted into the armor. "What do you think, Sergeant?"
"Don't know, Captain." He was in his armor, towering over me by a half-meter between the BPC and his own long bones. "Heard anything? buggies though." re prepping the north againgh. 1 looked to the the sky. "Word flash lit up hav pose, you nord to the wise I munitions?" He shook his head.
"We pick up any more armor?"
"We got eight hovers, six missle tanks and the orphan heavy That's all Sector Command left us when BEECH-V started."

He turned and looked at me from under his visor. His armor was a dirty, faded green, scarred here and there with field repairs. He was the oldest man of his platoon just as 1 was the old man of the Buggies. We see our twenty-firs year soon, wonder, he said, looking back to tur Cp?" A roll of thunder then a pressure wave passed over, pluck ing presure at passed ing gentiy at my jumper
s your answer!" I turn ed and doubled back to my hover. Mateland had the turbines hot and the hover buttoned down when I got back. I snaked through to the driver's cockpit and began strapping in. "Any dope come down yet?" ping in. Any dope come down yet? he ECM station. "That wind was a ten-key nuke--brigade says that the Micks have penetrated our front." I grunted, buttoning down my hatch, then keyed into the Command network for situation reports. According to the battlefield intelligence boys, the Micks had thrown about three battalions of armor into our MI, then gone to work on our main line of resistance. We were in for it. Things were "fluid", meaning things were coming unstuck in a very unfunny way. "The troop mounted yet?"
"Yeah, everybody's on line and hot." Some more data came over the brigade link. I fed it into Mateland's screen. 'MI drone reports an ogre coming down the pike?"
'That's what brigade said, hope we don't see that one." I strapped my self into the chair, watching my readouts come alive. My mouth was dry and I could feel thet my reflexes take over, I activated the computers, fed power to the gun turrents and tested all the circuits. Everything was up. "We re on line Mateland, maser the old man that we are go. Tell the troop to lift on my dust.
"Got you."
I idled the vanes for a minute watching the digitals for hot spots or harmonics. I went to half throttle, rocking us clear of the mud flat we'd bedded in a week ago. Dust billowed as small rocks clanged off the skirts. I put her in a

neutral turn and checked out the rest of the troop. Gordy and Rosco were clear and skidding off to the sides to clear fire lines. Rube was still rocking his craft clean. He was my worry, a new boy. He'd come in with the last repple draft and I'd drawn him. New boys always worried me. They could be as deadly to a troop as the Micks.

Lance to three, little more rev's."

Roger Lance, Rube's hover broke clear: "Lifting."
"Roger that, take up thirds." He dropped back a bit, covering the rear and ready to bounce over us if needed. I completed the turn in time to see one of our GEVs come helling over the foothills to the north. I spun about and dropped to it's springs. Two shockwaves ripp1ed across the plains in front of me, then another buggy topped the ridge. It was a Mick by the turrents. Our buggy gave it a Hiveloc right under the main gun, point blank. The Mick flipped off the ridge line, then fireballed as the iveloc round vaporized in the tur int armor will flow like wax
est armer will
loomed over the hill and casually smoked the GEV with it's main gun.
"Son of a bitch!" I poured power to the throttle, dumping thrust aft to slam us up to one ifty knots. "Pucker up roop." I cut into the Command link Troop B, Lance advancing. Request release.'

## Released Lance, form on

 A1 pha."Roger." I went to the Troop Link. "Lance to troop, form on Troop Alpha, arm micronukes." Our Hivelocs would smoke most normal armor, but not ogres. That's what we carried the nuke rounds for.
"Jake you wanta loose a drone?" Mateland had two scout drones up and ready. I thought a bout it for a second.

No that thing will have all sorts of ECM to scramble the drones Ne'11 just have to break close and eyeball it. Tell the major that we re going to see just how cherry it is.'
okay. I heard him key into the command link. "Lance to troop-the hover tream in the knocking along at about two hund red knots, breaking clear of the pack that was converging on the gre. The thing was four thousand eters away and it filled the screens already, it had rolled over the remains of the buggies and was coming right at us at fifty knots. We closed, a meter off the deck, unning full out and dipping from side to side. I dumped thrust down and we bounced ten metersinto air, skiming past tho ly buzzing a rhino. it s guns close and too fast to register. close and too fast to register. I roped ster again.

It's cherry." Mateland had an odd tone to his voice.
"How cherry?"
Off-the-bloody-tree cherry. Missiles, all it's guns. I didn't spot a single track out of place. It's cherry!"
"Judas!" I got on the command link to the CP. "Troop B, Lance. Mise is a Mark Three, undamaged. rejoin the rest of the squadron hen the Ogre swerved towards the skirmish line "What's that thing doing--MAJOR LOOK OUT!" The ogre fired on the line of GEVs, smashing away with all it's guns and mis siles. Three fireballed, one simp fell apart under the guns. Another hover staggered off and grounded, it's engine compartments shredded 'Missiles on hovers?'"
"It got four of them, "Mateland whispered into the mike. "Rosco's down but he might slope off if we can distract it."
"Hang on." I dumped every pound of thrust I had aft. The two surviving GEVs came slashing in, trying to draw fire from the crippled one. The Ogre didn't even nibble, it fired it's main battery and all the secondaries at Rosco. Nothing was left but a ten meter crater.
'Lance to troop, form on me!' led the hovers in. The missile tanks warned me they would salvo in about ninety seconds. I acknowledged and flashed past, hammering away at the main battery. Then the missiles landed, blanking out our screens. When they cleared, the main gun was only a burning sore in the side of the beast. Smoke billowed out of it and driblets of molten BPC armor sparked off the treads. The ogre lurched on, overrunning one of the missile tanks and scattering some MI that had tried to get the treads
"In there again, register on the secondaries. We came screaming n again, the secondaries were iasting away, concentrating on our the me tar into its turrents one of my sponors lost it's liner and the rounds ors ios bot the barrel We just cleared the target when the missile tanks landed another salvo on the thing When the fireballs dimmed, two of the secondaries were gone, bubbling in their sockets, issile tanks were brewed-up and thirdwas crippled. I pulled the GEVs clear, dropping into a gully about five hundred meters away.
"Pull that barrel, now!" told my gunner, then I tried to raise the CP. Mateland cut into the link before 1 could raise them.

Jake, l'm picking up one hell of a signal--" The ogre came over the lip of the gully and darkened the sky.
"LIFT! LIFT AND SCATTER!" We took off, jumping the lip of the gully before the ogre had time to cut us off. One of the other GEV didn't clear the 1ip in time. We heard his guns hammer at the treads then the ogre ground him into the dirt.
"Who's left, Mateland?"
"Number three, Jake.
I flicked on the link. "Leader to three.
"Go ahead leader."
"How's your ship?"
"Minor damage only, sir."
"Minor damage only, sir."' the 1 ink and laughed. It was my new oy. The one I thought I'd lose the irst time we ran into the Micks 'He's getting one hell of a
de-cherrying, eleast we know how the buggies get their fine young fools."

Whatever. Let's hit that son of a bitch again." I boosted the power up to the redline max and hased the beast down. Bits and hunks of equipment flashed by, ments of track and armor. I jinked the hover to one side to avoid the hulk of the Heavy tank, ground down to half it's volume.

Going in Rube, on the seconaries. We flashed by again; the armor, tumbling in mad trajectories back into our path. Our own Hiveloc rounds were gouging half meter square chunks out of the turret. got a flash of one MI clinging to a tread with a limpet bomb, then we were past and the missiles landed The shock waves near tumbled us, but the turret was dead.

It was too late though. It wa maybe five or six hundred meters from the CP. We hovered ten meters off the tracks, burning out our barrels with Hiveloc rounds. The MI threw themselves into the fires, ignoring both the ogre's AP guns and our fire to slashat the treads. But that machine just kept coming. "BUG-OUT, BUG-OUT. IT'S GOING TO OVERRUN THE CP!!" Men came scrambl ing out of the CP diving into light hovers and ATVs, the half squad of MI on the roof emptied their missile packs at the treads and then bounced away. Then the ogre dad on fifteen, of the $C P$, bogy assemblies. It could no longe bogy assemb MI di could no longer surv. that damned machine!" I 1eaned back in my chair.
Sunset brought darkness except for the molten-giow ogre and slender moon. With brigade CP gone the entire sector was without a coordinator. If they hit us anytime soon, we'd crumble like a dirt clod in a rainstrom.
'Mateland, contact HQ. Tell them we're untenable. Tell them we just had a waltz with an ogre and it stomped our tail. Tell them we got nothing left and we're evacuating right now. Don't take no for an answer.'

1 looked at the TO list. It was 1 ittered with KIAs and MIAs. 'Hell, I don't care what you tell them. We ve had enough.


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## STARWEB

a review
by Jay Reese

Computer games-by-mail are a fast-growing sector of the gaming industry. Flying Buffalo's STARWEB has been benefitting from ads in science fiction magazines and thus is growing like the proverbial dandelion.

STARWEB is a science fiction game of stars and star fleets. Play ers have a choice of six different identities: Apostles, Artifact Collectors, Berserkers, Empire Builders, Merchants, or Pirates.

Each identity has different objectives: The Apostle gets points for converting populations to his belief; The Artifact Collector gets points by owning artifacts found on various worlds, the berserker gets points for kuildg gets points for controlling worlds; the Merchant controling wor unt gets points pooints for plundering worlds points for plundering worlds
ifacts which give points standard artifacts which give points to the different types of players (Example, Berse rker can use). And there are special artifacts which give points special artifacts which give points
to any player (Example, Treasure of Polaris, which gives twenty points to its owner per turn).

The game is won by points. At the beginning of the game, players choose numbers between one thousand and ten thousand. These numbers are averaged, and the game is over when one player reaches the average number of points. The exact number, however, is kept secret until the end.

The game costs ten dollars to begin (which includes a two dollar deposit), good for five rounds. After that, rounds cost one dollar each.

The original directions were mimeographed in a manual which was hard to understand, so most original players like myself have had to play by trial and error. A second edition
of the rules was printed, with a shiny cover and better artwork. It had many rules clarifications and examples which makes play much easier.

To add to the complexity, moves have to be written by the players in a precise coded form for the computer. There is no provision for replay, so that if a player goofs, he pays the consequences. An example of an order moving a fleet two worlds would be F480 W505 W498. To attach an artifact to a fleet, the order is V307F411. To build seven ships on World 711 and attach them to Fleet 480, the order would be W711B7F480.

Results of each move come in a computer printout, which requires decoding. A partial example of one line would be W711 (505, 498) MASH ( $30,3,51,100, T / 0=2$, RMS 10 , I SHP =1, P SHP=2). Translated, this means that World 711 is adjacent to Worlds 505 and 498 . World 711 belongs to player "MASH", has 30 Indus try, 3 Raw Material Production, 51 Population, 100 Population Limit, and was owned two turns. It has raw material stockpile of 10 , has one I Ship and 2 P Ships defending it. There are further codes telling what fleets are present, and how many ships they have, which fleets went through, artifacts present, etc.

Each player is given a home world, (with industry, raw materials and population) to start. He may builu ships equal to the smalles either be attached to fleets ships may called "Keys"), or may be "I Ships" (defending a world's industry), or "defending a world's industry), or plation) (n industry can build one more indust or can or can increase the population limit by one.

A player may use his fleets ex ploring and claiming (or plundering or decimating or converting) other worlds. These worlds may also have certain artifacts which may or may not be helpful. Once the player reaches worlds owned by other players, he may either negotiate with them, or fight them, or both. A fleet may move up to three worlds per turn. Ships may also carry raw materials or artifacts.

There are rules for ambush, for battles between fleets or between fleets and worlds.

There are also unowned worlds which already have I or P ships which must be destroyed before a player can
claim that world. (This little goody is not mentioned in the rules.)

Diplomatic messages may be sent to other players either through the message system, or (once you have his name and address), by direct mail

Turns take three or four weeks, so that in a year players may have one fifteen to twenty turns (and the game may still not be finished)

As an Empire Builder in an early STARWEB game with a single-digit number, $I$ felt at round six that $I$ had had it. I was up against an unfavorable interpretation of the rules, plus a number of my own stupid errors, and I felt that it just wasn't worth the money.

But I decided to stick out a couple more turns, and by turn eight I was hooked. It began to be fun. Now I can hardly wait for the next turn to arrive by mail.

Here are some ideas for prospective and beginning STARWEB players:
(1) Make a map of the known universe, adding and changing as new stars are discovered. I trace around a penny, and draw lines between the worlds that have a connection (by he starweb). This helps me visualize which stars are connected with
(2) Make computers for the fleets (a la board games) so you can ove the on the reverse of each fleet count I print the word "Moved" so that I know which fleet has moved that turn when I am writing orders.
(3) I found it very helpful to make a 3 x 5 card file of the known layers both mine and those actors such as industry, raw mater ials, population, etc., as well as the neumber of I Ships and $P$ Ships at each world. Each turn, the infor mation is updated. The same informa tion can, of course, be obtained fom the computer printout but this is a double check against my own and computer errors. Also a Merchant could use the cards to tell how many times consumer goods were dropped on each world, a Pirate could record plunders, an Apostle could recor onverted population, and so on.
(4) Always double-check your turn order. I learned the hard way. It is too easy to write "F601" when you mean W601 and change the whole intent of the order
(5) Use any opportunity you
have to negotiate with other players preferably as soon as you become idea of what identity they have, and also what their intentions are (if they will tell you). And if a player won't answer your message, you can guess he might, for instance, be a Berserker.

If you are beginning STARWEB for the first time, or thinking in mind that it will take a few turns for you to really feel at ease with the various codes and moves. If you can get past the early errors and discouragement, you will find that STARWEB can be a fascinating game.

You might even become a STARWEBholic like myself. I am looking forrard to playing a number of games simultaneously, and trying a different role in each game.

## RIFT TROOPER

a review

by
Robert C. Kirk

If you're a Sci-Fi wargamer, it's a sure bet you'11 be interested in a really good simulation of Robert tunately, that description cannot be applied to RIFT TROOPER, published by the Dave Casciano Co. It is a good quality, professionally printed game--but it is clumsy to play.

RIFT TROOPER comes in a piastic zip-1ock envelope with a colorful cover card. Inside are three 21" by $26^{\prime \prime}$ paper maps--one of which is a plain hex-sheet, one a representa tion of a simple underground tunnel system, and the third has some craters, a small ridge, and a small valley which, in practice, contribute little to the play. Counters are in five colors and represent Terran Mobile Infantry, Skinny Platoons and buildings, Arachnid bugs, and Thoarks (1izard-type humanoids) They are die-cut, but incompletely so, needing to be separated with scissors. The six-page rules folder describes three scenarios (one for each map) and the basic rules common to each. The rules themselves, while complete, are not uniformly clear and you cannot be quite sure you're playing the way the designer intended.

The basic rules portend to movement and combat. MI movement is either by walking one hex at a time or by bouncing straight ahead four hexes (at a cost of "N" poin "H". N-type combat means launching a nuclear missile that any hex on the board you want it to affecting a circle of six hex radius, Each MI squad has two of these. Htype combat is regular shoot-thebastard type combat. Damage done in both types of combat are figured from cross indexing a die roll with the number of hexes distance between the attacker and his target. As long as the MI commander is functional, the MI can combine attack strength, which has the effect of lessening the range on the combat tables.

All three scenarios are clumsy to set up and extremely simple to Sweep", has the MI forces raiding a skinny town. Before starting, the skinny player has to locate on the blank hex-sheet a total of 49 count ers--21 buildings, 24 infantry pla toons, and 6 armored platoons. If any infantry is stationed inside a building, appropriate counters are stacked under the building counter They can also be stationed on the roofs and, yep, you stack them on top. The Terran player automatically knows where all the opposition is

The objective of the Terran player is to destroy 13 points worth of Skinny buildings. There are three Class III buildings worth 3 points each, six Class II worth 2 points, and twelve Class i buildings worth a single point apiece. So far, this is fine. However, the ten Terran's have to each operate separately since the Skinny will lob one of those N-type nukes at a group. To attack a building, you have to be adjacent to it with Skinny platoon
all over the place you'll likely all over the place you'll likely "buy a farm" with every building you take. Every MI lost cancels out the point value of at least one of the buildings taken. If the Skinny player will risk some buildings to be sure of getting the Terran commander with a nuke, the MI forces have little chance of meeting the victory conditions.

The second scenario is "Operation Royalty" in which the fearless MI descend into the Arachnid tunnel to capture/kill the queen andical.1y ater information the number they after information the are forced rill tory.

This scenario has problems too. The MI know exactly where all the tunnels are and where they leadeven the hidden ones usable only by the bugs. The single most interest ing facet of this scenario alsomakes it extremely clumsy to set up-the position of any bugs in the tunnels is not marked by a counter, but is recorded using an inadequate coordi nate system. Once and MI passes within one hex of them, or if they move, they are thereafter marked by a counter. One little logical fallacy establishes that an MI can only recognize an unmoving bug at a distance of one hex-even in the caverns apparently-otherwise he doesn't know anything is there. Despite these failings, it is potentially the best scenario of the three.
"Encounter" portrays a firefight between two Terran MI squads and a single Thoark MI squad. (In case you're wondering, this isn tin Heinlein's book.) This seemingly traight-forward scenario is encu ered by a set-up which simules he Terran Mi dropping from the ing ship. For all the a the terrain features have, a blank hex her is the player who destroys the er the units and as the Thoark a outnumbered 2 to the Thoark la play "Oper lion Royalty" plays the
operaving half-hour. The ongest, ech with generally dull action. All three are two player games, wit o provisions made for more than two players.
RIFT TROOPER is available from Dave Casciano Co., Attack Interna tional, 314 Edgely Avenue, G1enside pa., 19038 for $\$ 8.00$. I would recom mend you read or re-read STARSHIP TROOPERS before playing--you'11 have better idea of what is being simu lated.


inducing certain diamonds to self

## WAR OF THE SKY GALLEONS a review

by
Steve List

WSG is one of a trio of games collectivcly called WARRIORS OF THE GREEN PLANET. This game deals with aerial warfare, the other two with land and psionic combat. A three page "history" in the rules explains the background for the trilogy: "About 60 years from now, a radical tilt of the earth's axis occurs, leading to catastrophic geologic and climactic changes, and the obligatory end of civilization as we know it. One scrap of knowledge that sur vives, however, is the technique of
destruct These precious power gems become prized for both civil and military purposes. It is also discovered tha if one uses laser light to fuse hy drogen, the resulting helium has 40 time the lifting power of natural helium." This makes the sky galleons possible (Presumably the vast energy released by the fusion isn't a both ersome waste product, as no mention is made of it!).

Rather than being airships of the usual pattern, gondolas hung under gas bags, these galleons have rigid double hulls of a super pape mache, with gas in the outer section, cargo in the inner, and space and weapons on act the cover the whole thig. 19 th century art shows a beaut under full sail with pair of gun houses fore and with a pair of gun Fletcher-class destroyer In the foreground can be seen an apparently mastless vessel
with muzzle loading cannon in broad side batteries. Esthetics aside, this sort of construction leads' to ships oddly suited for aerial warfare. The main batteries are mounted fore and aft and have upward and downward play, but the secondary batteries (of less range and power) fire only broadside with upward play. The main stings of these ships are in their ends, and in that respect they resemble galleys more than galleons. They should fight in line abreast rather than line ahead, and the use of boarding as a tactic reinforces this. The fields of fire of the main and secondary batteries do not overlap, but each ship counter occupies two hexes and so may lie in more than one field. Ships can also damage each other by dropping rock ballast on a target below them. There is another tactical idiosyncrasy to contend with; ships must always move their full Movement Allowance. Since the four types in the game have three different MAs among them, maintaining heterogeneous formations is nearly impossible.

In play, the game bears some resemblence to WOODEN SHIPS \& IRON MEN, with the third spatial dimension added. There are nine possible altitudes from ground level up, and forests and hilis can be real hazards to low flying ships. Play is sequential, with each player turn made up of 6 phases: Altitude decision, Degrappling, Movement, Grappling,
Laser Combat and Boarding, in that rder. Ships take only Weapons and uoyancy hits - two of the former nocks out all main armament, with furcy ancy hits. The o a point, at whe ship gous nto a controlied descent or it rrishes here are also a variety $o$ fire-power to immediate destruction Four to marios are destran riting your own is easy to do. The ame itself is easy to learn and plays swiftly. For those who and swallow the "science" fiction backround and overlook the absurd enineering it postulates, this can a heering enjoyable game. In can be physical and design quality it is physical and design quality, it is products. One unusual aspect may products. One unusual aspect may the game counters are mounted and die cut, but the ships themselves are printed on adhesive backed paper and must be mounted and cut by hnad. WAR OF THE SKY GALLEONS is available from Fact $\&$ Fantasy Games, P.O. Box 1472, Maryland Hts., Mo. 63043 for $\$ 5.50$.


## OGRE

a review
by Robert C. Kirk

Metagaming Concept's first MicroGame, OGRE, designed by Steve Jackson, is everything it is advertised to be. It's a lot of game in a little package. In fact, I was somewhat surprised when my copy arrived--the entire game comes in a 4 by 7 inch package. True, it is advertised as being small in format

Anyway, the heavy paper map folds out to 8 by 14 inches and the sixteen page rules booklet not only gives basic and advanced game rules, but fits in several optional rules as well. Miniaturized verWinch the excelient graphics by roxt ext are printed on the counters light come in thite, light grey, and dark grey) to depict the various armored and, of course, the Ogre.

The rules both read and play well. Read through them, play the basic game once with the booklet learned a new, and you will have cord sheets you need are easily whipped up in about 10 seconds on
a piece of notepaper. They serve to record the progressive destruction of the Ogre.

When setting up the game, the non-Ogre player locates his command post, missile cannons, armored rubble-area of the map. The rubble serves to hinder movement of anything less than an Ogre. The Ogre thing the map from the river at the far end From this point a description of the play reads like Steve Jackson's feature article in TSG \#9. Notes on the Ogre. Combat results are designed so that the Ogre is blown apart a piece at a time. On the other hand, anything an Ogre hits, if not totally demolished, is at least temporarily out of action.

The Ogre's sole objective is to survive, the Ogre must be im-range--a while it is still out of and crush it an immobile Ogre can blow it to bits. If the defending general becomes too concerned about destroying the Ogre's arms, the brute will stoically drive right through the post. This is invariably fatal to generals, but doesn't even bruise Ogres.

Strategy is, of course, depen dent on the players' skill and the composition and placement of forces In general, the GEV's should not be overestimated--they're fast, yes, but the Ogre is faster and has a longer weapons range. Howitzers are wasted at the edges of the boardlocate them centrally so they can fire to either side. Ignore his weapons and shoot for the threads you ll loose some tanks until the Ogre runs out of missiles, but unless you can slow him down so that your own tanks can keep up, the Ogre can drive straight for the
command post, ignoring anything in command post, ignoring anything i ts way.

If you're the Ogre, keep as far away from those howitzers as you can. Don't waste missiles on them, use them on the enemy missile tanks-they have a range greater than your guns, and unlike the mass is probably your greatest mass is probably your greatest If this doesn't kill thent tanks right off it at least tanks right off, it at least knocks the out for the them cheaper to kill

OGRE is attractive, easy to learn, inexpensive, and fun to play What more can a gamer ask? OGRE is available from Metaoming Concepts for \$2.50 for TSG subscribers and \$2.95 for others

## BATTLE FOR ANDROMEDA

SUBJECT: My revijew of "Battle For Andromeda"

UGH.

TO: SJ
FROM: CBO
SUBJECT: The review you were supposed to write.

What do you mean, "Ugh"?
What kind of a review is that?

TO: CBO
FROM: SJ
SUBJECT: BFA REVIEW
It's a crisp, concise, accu rate, to-the-point review, that's what kind of a review it is. I repeat: UGH.

## TO: SJ

FROM: CBO
SUBJECT: That review.
I gather what you are trying 0 say is that "Battle for Andromeda" is a lousy game. If that's the case,
come out and say so. None of this cutesy stuff. Besides, consider how much you make off a one-word review at our going rate.

## TO: CBO (By the way, Ben, what does the " C " stand for?)

FROM: Stevie Wonder
SUBJECT: That review again.
Yes; very perceptive of you. It IS a lousy game. If you want the gory details, you can have them. But I've always wanted to totaliy demolish some turkey game with a one-word review, and this looked like my best change for a long time. I'd even forego the $49 \phi$ that an average review would earn me....

## TO: SJ

FROM: CBO (None of your business.) SUBJECT: Review

OK. If it means so much to you, we'11 print the 'Ugh." I expect people will get the idea. But can you send me a few things, like the publisher and the price, that people might want to know? And, while you re at it, how about at least telling me why the game is so ugh?

## TO: CBO

FROM: SJ
SUBJECT: Battle for Andromeda
OK. It's published by Taurus Ltd. There's no price marked on the package. As to what's wrong with it: where should I begin? Components first, I guess. The counters aren't too bad - there are six sets, big heavy stock, bright-colored and die-cut. They have silhouettes and/ or designs on them; some also hav the initials for their type, but lost . With practice, you could learn to tell them apart. The map sure of a spiral mexgrid ss superimposed. But the rulebook... rulebook.

You know it's going to be
bad when you see the cover. Two models of the starship Enterprise are fighting with a little Buck Rogers ship and two WWII floating mines - one with a double fuselage and the other with pterodactyl wings. (Wel1, that's what they LOOK like.) Inside, the type is little, be so and if red. But that wouldn be so bad if the rules which they don't.

Here I have to admit that I haven't actually PLAYED this game. I doubt anybody anywhere has ever played it. I don't think it's poss ible. I ve spent too much time already on this rulebook, and I sure wad a set of opponents who under stood.

These rules are totally lack ing in organization. There is no table of contents and no evident logical order - and the book is 43 PAGES. In TINY type on $81 / 2$ x 1 Sheets. Imagine leafing through when you FIND the rule, you won't when you FIND the rule, you won t is truly god-awful. It mixes rules examples, and pseudo-science explanations in long, rambling, disorganized sentences. It is the next thing to incomprehensible. I quote: "One quality that redeems the DLC and DMC type ships and gives them a purpose in being constructed, is that not only do they have the multiplicative value against the more numerous DD craft, but they can attack any types of craft in hexes adjacent to them, but just in the hex they occupy." That is an AVERAGE sentance. What do you suppose it means?

Even if the rules were written so that you could under stand them, I doubt very many people would want to play this. Much too long and complicated. As close1y as I can make out, each of a player's major ships or bases (maybe a total of 15) has to choose, each turn, between 23 different "combat options' each of which is a different balance of power allocation to about 10 different functions. Of course, when ships take damage, they have, less power, but they can get it back, up to a point. Et cetera.

The movement rules are
equally foggy. To add to the confu sion, the board is stated to have 13 levels, of which the one we see is evidently the middle one. But the only way to tell what level a counter is on is to have it written down!

I could go on like this for pages, but I won't. Instead, a hypo
thetical game:
SATURDAY: The players get together and set up for play
SUNDAY: The first player makes his move. All players then spend three hours recording various factors on pieces of scratch paper.
MONDAY: The first player wishes to
initiate combat. However, a minor rules dispute requires two hours to clear up. In the process, it is discovered that three of the players have set up wrong.
TUESDAY: The first player tries again to initiate combat. Four hours of record-keeping later, he is through. At this point, one of the other players notices a rule that gives all players limited simultaneous movement. They consider starting over, but decide to go out and get drunk instead.

You see why I just wanted to say "Ugh"? This game is totally unplayable. It is a disaster. If I wrote an honest review of it, people would think I had it in for the designer (whoever that is). No one should buy this thing. It is a perfect example of how NOT to de sign a game. Someone evidently labored many months, and all they have is a complicated, self-contradictory, unplayable mess. I reread this, and "it realiy sound vich but this "game" is awful. I pity nayone who puts down good money for it.

## O: S.J

FROM: CBO
SUBJECT: YOUR REVIEW
I see your point. Running a review like that would be pretty revigh. On the other hand, don't people deserve to know when a game people deserve to know when is so totally bad that they'll never be ab1e to play it?

TO: CBO
FROM: SJ
SUBJECT: stuff
Yeah - maybe. One thing,
though - are your short of space for material for the next issue? I have to think that my one-word

T0: SJ
FROM: CBO
SUBJECT: review
Oh, don't worry. I'11 think of some way to fill the space.

## TO: HMT

FROM: CBO
SUBJECT: Steve's "Battle For Andromeda" Review
Well, it worked. I got three pages out of him. He really put it lown. That must be one TERRIBLE game.

# AFTER THE HOLOCAUST 

## a review

by Norman S. Howe

The date is 2001 A.D. The world still survives, 20 years after the Third World War, a nuclear holocaust. Parts of the United States have begun to recover, under the direction of the Bank of America in the West, the Bell Telephone Company in the East, The Church of the Chosen Few in the Midwest, and various military groups in the Southwest. Each wishes to be solely responsible for rebuilding the U. S., and is willing to fight the other groups for the privilege...

This colorful scenario is merey a clever ruse conjured by Redmond Simonson, the designer of AFTER THE HOLOCAUST, SPI's latest "Power Politics" game. This game is really about Macro-Economics, Regional Development, and other occult subjects. The post-war fantasy trappings are in.
tended to lure the unwary gamer into geographic map are area control inlearning something about a complete- dicators. Each player must build his ly non-military subject. What a own armies

## sneaky trick!

ATH is attractively packaged in a yel $\overline{10 w}$-orange Bookcase-type hardbox. Components include a sorting tray, a two-piece $22^{\prime \prime}$ x $34^{\prime \prime}$ mounted map in three colours; 400 counters (in green, yellow, blue, and brown) rule booklet, auxillary charts for players, and two large sheets of play money and Corruption chits. SP ar those who mapboard problems, for those who were disappointed by heinkl wrinkled. The play money is a nice ides in plausible preen, on both five in plausible green, comes in quite rolistic and qu the bills ic The onitharking in numbers not sign) and the engraving swirls, so and the be seeing them in future games. The counter mix will come shock to conventional wargamers of the 400 counters, on1y about 100 re present actual "units". This conforms with the playing area, which is on $1 y$ about $\frac{1}{4}$ actual map. The remaining area is taken up by the economic record charts used by each player. The remaining counters are indicators to be placed on the chart, and map

The map covers the continentai United States and southern Canada. A standard hex grid is used, but th map is also divided by shadings into about 60 areas, representing control units. Each area supports $1,000,000$ people at a subsistence level. The map also indicates the locations of usable resources, such as fuel, etals, and undamaged factories errain is simple: clear terrain rough terrain, mountain hexsides, rivers, lakes, and ocean (for wate transport), and Devastated Hexes, where everyone's home city used to be. The last are indicated by skull and crossbones; it is possible to traverse them, but is expensive. And causes radiation burns if your army winters there. All areas have equal agricultural potential, for simplicity. Because some areas are larger than others, it tends to even out the unrealism.

The game charts are fun. They record stockpiles and output, labor and mechanization allocation, resource and production levels, the size and flexibility of your trans port net, standard of living, level of unemployment, numbers of starving workers, and level of political and economic control. Most of the count ers are placed here. At the start of the game, the only counters on the
play is divided into several phases: production, trade, political and military action, taxation, main tenance, and depreciation. Production is determined by the player's allocation of labor and mechanized units; modified by weather in the case of food production. Trade is an extremely important phase in the game; players interact with each other to try and balance their out puts. Prices are determined by the players: someone who's just suffered a poor food production phase will pay anything to keep his people from starving. The political phase is used to Mi poricatich prevent Mitary units may be used to control of an area important to you. Armies af gain control, arous ald coctions in areas and win hem They must keep their "campa promises" by providing consumer good and transportation The consumption phase provides indications of a phase provides indications of a tion must be fed; if there is insufficient food, laborers become unemployed and starve. Consumer goods must be provided to ail Consumer good must be provided to all workers. Th worker determines the Sector State and Social State of that player. Thi is important: victory conditions are determined by number of areas controlled, and by Social State. If a player allocates consumer goods unevenly, and tries to hoard points, the workers attempt to go on strike. This can be fatal, as it may leave half the labor force unemployed, with no prospect for improvement. In the Maintenance phase, unemployment and starvation cause a player's political control to slip and fail in some areas. Taxation provides the money needed for various purposes Taxation can be reduced by promoting corruption in an opponent's government; while excess taxation causes reduction in industrial output. Depletion and depreciation reduce stocks of food, metals, and fuel, and reduce numbers of mechanized and transportation points.

This is a marvelous game. They even provide income tax forms for the players. I get so involved in the economics that I've never used the military units at all. For one thing, my economy's too weak to support any army.

AFTER THE HOLOCAUST is available from SPI, 44 E, 23rd St., New York, for \$12.

## SWORDS \& SPELLS a review



SWORDS AND SPELLS is, as the subti $\frac{10}{}$ le indicates, a set of rules for large scale miniatures battles based on the game DUNGEONS AND DRAGONS.

Basically, $S$ \& $S$ is a very elaborate and expanded updating of the CHAINMAIL rules. $S$ \& $S$ is ex tremely well done. The layout is excellent, appropriate, and the ruls in superb. They are when in a clear assimilation

The rules are particularly strong in one of the most difficult areas of fantasy miniatures--magic. The spell casting and spell chart make applying $D$ \& $D$ magic to miniatures very simple and straightforward. Also, the sample game in the appendix gives a number of examples of magic, and this helps in further clarifying this often nebulous area of fantasy wargaming

The other rules are equally logical and concise, and make $S$ \& $S$ highly recommended buy for someone just getting interested in miniatures wargaming. Of course, to use $S$ \& $S$ you must already have a copy of $D{ }_{\xi} D$ and all the supplements.

Although the author (Gary Gygax) obviously spent a great deal of time and effort on these rules, especially the magic section, some concessions were made to allow fo a more streamlined approach to miniatures. This reviewer found $S$ \& S to have a nice balance between complexity and playability. The staff of TSR should be congrat ulated for another fine piece of work.

SWORDS AND SPELLS is available for $\$ 5$ from TSR Hobbies, Inc 7 , 75 , Lake Geneva, WI 53147 , or from Metagaming.

## DEAR EDITOR,

I borrowed a copy of Godsfire from a friend, and was planning to review it, but changed my mind. I don't think I could justly review game without playing it. Hence, this letter.

Godsfire brought tears of pain to my eyes. The ideas are present and the artwork is lovely, but I feel that the game is a white eleplay. As you predicted, it is a phy sically large game- in fact, too large. If the full components are laid out for play, a complete pool table or table tennis table is needed for comfort. The scenarios using only one map are easier on space Why is so much space needed? You were trying to save the players fro doing paperwork. By using regular hexes and a written altitude record, the map could have been reduced to $2^{\prime}$ square. I have less quarrel wi the system sheets, but these are only used to effect in the Advanced Game.

This leads to my second complaint: the physical components for the Advanced Game seem almost an afterthought. The Gigabuck counters are too thin; they will be mutilated and torn unless they are mounted on ardhoard; as presented, they will e difficult to lift from a flat surface. You have not provided indicators for the system sheets; this is merely an annoyance. A player may be expected to provide dice, paper, and pencils for a game, but he should not have to make counters from nothing (a practice, I fear, which even SI uses on occasion, especially in its smaller games). You allow us to move GBs through space unescorted. Your memories may be good, but mine is poor; I would have to make additional indicators to remind me which
GBs belonged to which players. I canGBs belonged to which players. I
not comment on the Advanced Game, not comment on the Advanced Game, except that it seems a quantum leap beyond the Basic Game; a leap some players may not be able to make. hould that some of the economics should have been incorporated in the
Basic Game.

The final problem that bothered me was the technological premise of the game mechanics. Sublight travel and instant communication is feasible to me. The combat system is incomprehensible. What weapon system is used, that can attack an enemy $\frac{1}{1}-\frac{1}{2}$ at the speed of light? Missiles launched through Gregory-space? The "technological breakthrough" allowing 6 cells movement per turn is bewildering. A faster-than-1ight drive should allow much faster travel; per haps you were trying to prevent too devastating an advantage.

Norman S. Howe Winnipeg, Manitoba Canada

I apologize to the readers of TSG. There were two errors in my article TANK: Present-Future-Ogre (TSG\#10).

In the first case I stated that the Cruise Missile's TERrain COntour Matching guidance system used visual recognition of the terrain it was passing over. I misinterpreted a somewhat vaguely worded article. A more recent article described the guidance as a combination of internal (magnetic compass, gyro-compass, and computer memory) and a system that compares the actual altitude changes of the terrain below the missile with stored memory of altitude changes for a much larger area along the missile's course. It checks al titude changes against a computer memory topographical map. Another variation on the guidance, which is under development, would use electomagnetic anomalies in the Earth's magnetic field along the course in stead of altitude changes.

Although both of these systems would be useful in a cybernetic tanks guidance, it is not the visual guidance system I described.

In the second case the sentence 'With a one kiloton nuke, detonation, infantry in the open are vulnerable only at 300 meters or less." should have read, "With a one kiloton nuke, detonation, infantry in the open are vulnerable out to 1,400 meters, but tank crewmen are vuinerable only at

300 meters."
For these errors, I again apologize to the readers of TSG.

Charles R. Bowles Colo. Sprgs., Colo.

For TSG\#10, Shayne Gad's "SC Tournament at WARCON III" leads with a full 9. This is the kind of artic 1 like, dealing in a well-rounded manner with both strategies and play er applications. Although Mr. Gad neglected to explicitly mention on of the adjustments" of SC rules made in the tournament-namely, allo ing a player to use a conquered colony's industrial output the first Production Year after its conquest, rather than the delay of one PY re quired in the rules-both that "variant" and the fact that population increments were permitted to purchase their own CT's answered a question that has bothered me for some time: how players, in accounts l've read of SC games, are able to be turning out DNs by Turn 20 when I'm still scratching to field ATKs

As for the strategies he ad vances, I found the Population Shuttle to be, well, it sounds like its against the rules (itisn't, I know, but it still doesn't seem kosher) and anyway what good will the population increments do if they spend all their IU points on CTs to shuttle back and forth? The Grape vine is a plan I have used (to a legree) once or twice, planting "minimal colonies" of $4 \mathrm{M} / 4 \mathrm{IU}$ to hold :strategic stars, usually MT worlds, to extend my radius-of-operation. The "pure" GM plan strikes me as risky, since if your enemy lucks onto your industrial colony with any sort of adequate expeditionary force you might as well resign; cut it as fine as you like, but some of the output of to MBs and ESCs before another player can reach it. Finally, in the player can reach it. Finally, in the Crispy Critter ploy, colonies?

Chris Chyba's "Planetary Probabilities" and Chet Edwards' "Alien Inteliigences ar study of one of The first, a good study of one of have used a bit more work, dealing with chances of finding a system wi any habitable planet, but even so it was interesting; but then, I'm something of a mathematician, so I could be prejudiced. The other article is
proof that the basic SC game may be endlessly adapted and altered, each variant presenting new challenges and play possibilities.

Winchell Chung's ATK layout should also get a 7 . Now that he's done the warships of SC , and depic tions of the CT and SCT, I trust he will also try his hand at missile installations and industrial facitities, if only for the fun of it. Charles Bowles's TANK and and Stephen Cole's "Duel" get 6's from me, the first as a nice "off-the-cuff" speculation on the possible future of armored warfare, the second for being a short, tidy look at the role of the OGRE from the point of view of the "bloddy infan-try"--who, like as not, will still be the only arm of the military that can occupy and hold ground. I'11 also give Steve Jackson a 6 for his workmanlike adaptation of 6 -sided dice to the use of "exotic" probabi lities.

I tend to gauge reviews as "average" at the best of times, so Robert Taylor and Steve Jackson get a brace of 5 s for "Metamorphos Alpha" and Bunnies \& Burrows, both of which were properiy infor his "wincon III Roport" astly because WAR its breviry which is understand of its brevity, which is understand an , an adequate treat of the issue! issue!

Finally, I'm afraid I didn't care much for Mr. Rahman's "The Dust of Bianas". Although his undead izard was an interesting concept, found his presentation less than dequate--I'm still not certain in which milieu it is set--and the end ing a bit too much deus ex machina. quantified qualification.
quantikewise, I shan't pass judge-
on the other features. Being news, reviews of books, ratings, ads and "plugs", they are as they should be, informative, as is "Where We're (You're Going". I read them, and find them interesting, but I scarcely subject them to a critical appraisal.

The issue overall gets about a 7.5 in my judgement. And you might H. Beam Piper wrote a number of military and military-oriented SF yarns--SPACE VIKING, FOUR-DAY PLANET, LORD KALVAN OF OTHERWHEN, "Ministry of Disturbance"--as well as the classic LITTLE FUZZY and its seque1, THE OTHER HUMAN RACE.
C. Griffin Mitche11, III

Merritt Island, Florida

The only thing I don't like about Ogre is the fact that it is light gray and dark gray counters light gray and dark gray counters. $t, m y$ friends and $I$ began thinking of some friends and 1 began thinkin help to make it more realisticht. are some of them: are some of them: mines) (to be used in conjunction with hex, don't roll to see if it activ ted the mine because they travel mostly above the ground on a cushi of air.
(2) Exploding Power Plants - When an Ogre rams another Ogre, roll one die If the number rolled is one, it means that the power plant in one or both or both of the Ogres exploded because of the shock. The resulting explosion has the same effect as the one caused by an Ogre self-destructing. This rule should only be used if the combined movement factors ex pended by the two Ogres is greater than or equal to 5 . In other words if one Ogre moved 3 in its last movement phase and the ramming Ogre moved 2, then roll the die $(3+2=5)$ However, if both Ogres moved only 2 , then don't roll. This rule came to mind as I read "Duel" in the number 10 TSG.

> Another thing I've noticed is that when two people are playing an Ogre vs. Ogre game, the guy who gets in the first good shot or shots will usually win. This can be solved by using a simultaneous movement and combat system. Both players simply record the number of the hex they in tend to move into. When both players have done this, they move the Ogres into those hexes. If they aren't within range of each other yet, repeat the procedure. Once the Ogres are within range of each other, one player should fire all his weapons that are within range of the enemy ofre and the damage should be marked the Ogre's record sheet). The other player should then sheet). The other After all combat between the Ogres is completed for that turn, the damage done to each ogre should then done to each Ogre should then be Now the players go ment phase and start the move In other words, when one next turn. at another, the damage done isn't recorded on the Ogre record shit

This reflects the idea that both ogres are going to enter within range at each other at about their weapons They aren't going to just sit there waiting for their turn to move and fire.

Overa11. I feel that Ogre is 1 really great game and I think the microgames are a fantastic idea.

Vernon Thorp Burnsville, Minn.

My congratulations to Steve Jackson on the fine little game Ogre. More play for the money, but play more games in the same time. One of the first things that I noticed, though, was the uselessness of heavy tanks. With a range of only 2 hexes they are sitting ducks for secondary batteries, and they make nice doormats for an Ogre to wipe its treads. Far more protected for the same attack strength allocation are two GEVs, with a combined defense of 4 compared to 3 , and invulnerability once missiles and main batteries are gone. One way to give Heavy Tanks some worth would be to increase their range to 3 . GEVs still look better but it will make tanks more competitive.

Science Fiction wargames seem to be perfectly suited for the Micro game format. One of the problems our society faces is that modern weapons destroy an awful lot in very little time, a problem in maintaining peace, but ideal for carnage loving gamers.

Tracy Harms
Tacoma, Wa.

Our group has been playing OGRE for a while now, and we've hit upon an idea that other gamersmight like to know. We don't know how it would work out, since we've not had the opportunity to try it, but it just might work out very well.

Instead of using the planetary attack step in SC, you can dispence of that and use the OGRE as well. Each dreadnaught could carry 5 OGRES, each Attack 3, and each Escort could carry one. This would add more realism to the planetaryattack step than simply burning millions of colonists, which is unrealistic in the first place.

Patrick Brennan East Hartford, Ct.

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